

## **TABLE OF CONTENTS**

I	ACKNOWLEDGEMENTS	iii
II	INTRODUCTION	v
	OVERVIEW	ν
	PLANNING PROCESS	vi
	PLAN FRAMEWORK	viii
	Vision	
	Goals & Action Areas	
	Outcomes	
Ш	COMMUNITY OVERVIEW	xviii
	HISTORY	xviii
	A SNAPSHOT OF LOWELL TODAY	xix
	A DECADE OF SUSTAINABILITY ACCOMPLISHMENTS 2003 - 2012	xxiv
IV	GOALS	1
	SUSTAINABLE NEIGHBORHOODS	1
	HOUSING CHOICE	19
	MOBILITY & ACCESS	37
	VIBRANT & UNIQUE URBAN HUB	55
	HEALTHY & SUSTAINABLE LOCAL ECONOMY	83
	ENVIRONMENTAL RESILIENCE	109
	EFFECTIVE OPERATIONS, INFRASTRUCTURE & TECHNOLOGY	127
	SUSTAINED PUBLIC ENGAGEMENT	
V	PLAN IMPLEMENTATION	151



## **SUSTAINABLE LOWELL 2025**

Photo: COOL

## **ACKNOWLEDGEMENTS**

#### **CITY COUNCIL**

Mayor Patrick Ó. Murphy Rodney M. Elliott Edward J. Kennedy, Jr. John J. Leahy Martin E. Lorrey William F. Martin, Jr. Joseph M. Mendonca Rita M. Mercier Vesna E. Nuon

Bernard F. Lynch, City Manager Adam Baacke, Assistant City Manager/DPD Director

## PROJECT MANAGER AND PRINCIPAL AUTHOR

Allegra Williams, Neighborhood Planner

#### **PLANNING BOARD**

Thomas Linnehan, Chairman Richard Lockhart, Vice Chair Joseph Boyle, Member Gerard Frechette, Member Stephen Gendron, Member Robert Malavich, Member

## SUSTAINABILITY PLAN STEERING COMMITTEE

Aaron Clausen, Senior Planner Maria Dickinson,

Economic Development Officer Joe Giniewicz, Assistant Planner Allison Lamey,

Community Development Director Craig Thomas,

Urban Renewal Project Manager Sandy Swaile, Design Planner Allegra Williams, Neighborhood Planner

#### **GRAPHIC DESIGN AND PRODUCTION**

Sandy Swaile, Design Planner Mike Moyle, Graphic Designer

#### **SPECIAL THANKS TO**

Sarah Brown, Environmental Officer Suzzanne Cromwell.

Cultural Organization of Lowell Jennifer Demers, Girls Incorporated Joe Donovan, GIS Manager Eric Eby, Transportation Engineer Erin Findlen,

Economic Development Assistant Eric Gordon, Emerson College Tom Heslin, Better Buildings Program Manager Joe Hungler,

Boys & Girls Club of Greater Lowell Rachel Kisker, Chief Design Planner Ricky Mao, Design Intern Donna McIntosh,

Human Resources Assistant Director Jennifer Molina, GIS Intern Marlon Orozco, United Teen Equality Center Theresa Park,

Economic Development Director Michelle Ramalho,

Lowell Senior Center Director Linda Sou, LCHC Teen Coalition Sopheap Theam, Light of Cambodian Children Diane Tradd, DPD Deputy Director Nancy Spenard, DPD Executive Secretary Mark Young, LRWWU Director

#### **PHOTOGRAPHERS**

Jane Albert

Ameresco

Robert Anderson

Lisa Anderson-Bisson

Adrien Bisson

**Boston Chowder Company** 

Boys & Girls Club of Greater Lowell

Ashley Cantrell

Career Center of Lowell

Norm Caron

Coalition for a Better Acre (CBA)

Joseph Cote

Cultural Organization of Lowell (COOL)

Mary Cutter
Deb Forgione
Marianne Gries

Ben Hill

Donald Hogan House of Hope Dick Howe, Jr. Icon Architecture

Dan Koff Konarka Lianna Kushi

**Lowell Canalwater Cleaners** 

Lowell Community Health Center (LCHC)

Lowell General Hospital

Lowell National Historical Park (LNHP)

Lowell Parks & Conservation Trust (LP&CT)
Lowell Telecommunications Corporation

Massachusetts Institute of Technology

Donna McIntosh Robert McIntosh

Merrimack Repertory Theatre

Merrimack Valley Housing Partnership

(MVHP)

Merrimack Valley Sandbox

Merrimack Valley Small Business

Assistance Center

Meghan Moore

Minneapolis Mill City Museum

Mill City Grows Jennifer Myers

Neoscape Bob Philpot

Higgins & Ross Anne Ruthmann

Narin Sinuon

Som of a Bike

Bob Stegmaier Sean Thibodeau

Trinity Financial

UMass Lowell

United Teen Equality Center (UTEC)

Emily Vidrine Angela Vincent

Watermark Environmental Inc Western Avenue Studios (WAS)

Xenith

### **OVERVIEW**

In recent years, as cities have begun addressing climate change, social equity, and other pressing community concerns more proactively, the concept of sustainability has begun to permeate many long-range planning documents. In Lowell's case, the concepts of social, economic and environmental sustainability have been interwoven into each section of its Comprehensive Master Plan in an effort to better adapt to changing local, regional, and global trends over the next 12 years.

The result of this Comprehensive Master Plan update process is Lowell's new Sustainability Plan, an officially adopted public document that establishes long-term policies and a shared vision for smart, responsible development within the city. Included herein are recommendations regarding

transportation, economic development, housing, the physical environment, and other community resources.

The Plan also guides the development and maintenance of the many facilities and services provided by the City. As such, the Sustainability Plan is one of the primary policy tools utilized by the City Council, the Planning Board, the Zoning Board of Appeals, and the City's Administration, including the Department of Planning and Development, the Department of Public Works, and other entities. Ultimately, the City hopes that this document will be embraced and utilized citywide by both private and public stakeholders, as well as residents in Lowell, as a way to ensure its implementation and positive impact on the community as a whole.



**Public Participation Process** 

Photos: DPD



## INTRODUCTION

## COMPONENTS OF THE PUBLIC PARTICIPATION PROCESS INCLUDED:

- An 800-Household telephone survey conducted in English, Spanish, Portuguese, and Khmer by Research America, Inc., a consultant firm hired by the City. Raw data was provided by the consultant, and data was analyzed and formatted by DPD.
- Hosting of 5 public visioning sessions that were attended by over 160 community members and were conducted in English, Spanish, Portuguese, Khmer. Visioning topics included: Housing & Public Services, Transportation & Mobility, Economic Development & Institutional Partnerships, Open Space & Natural Resources, & Community Character, Engagement & Identity.
- The launch of a free, fun, online participatory planning tool in partnership with Emerson College, over 60 young people from 6 local youth organizations, and Lowell Telecommunications Corporation, who provided their

Continues on facing page

## **PLANNING PROCESS**

The planning process undertaken by Lowell's Department of Planning and Development (DPD) in developing this Sustainability Plan was consistent with efforts generally employed in other comprehensive planning processes. This process is further outlined below:

#### **STEERING COMMITTEE**

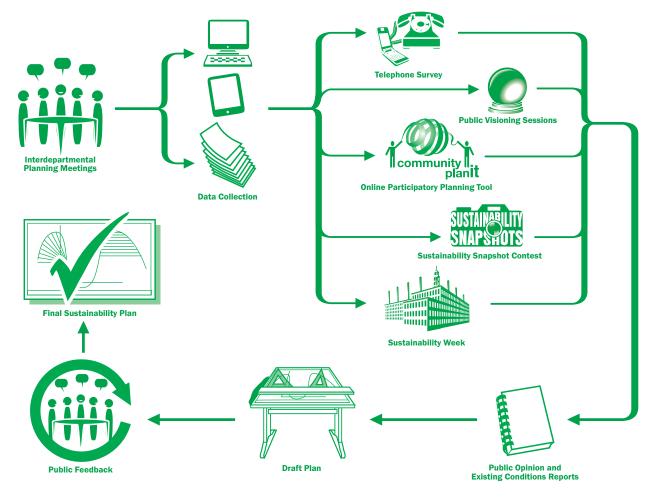
A Steering Committee comprised of members from the Department of Planning and Development (DPD) was formed to oversee the planning process between the Winter of 2011 and the Fall of 2012. The committee held a series of 10 interdepartmental meetings on topics relevant to the development of the plan to collect initial input from employees with particular expertise. The Committee was also involved in the data collection and public participation processes to follow.

#### **DATA COLLECTION & EXISTING CONDITIONS REPORT**

Existing conditions data was compiled into a final report to provide a snapshot of current conditions in Lowell today and to map trends over time. The information collected – comprised of demographic, land-use, transportation, housing, open space, and economic development data – served as a foundation for the visioning and planning of the city's direction in the future.

#### **PUBLIC PARTICIPATION PROCESS**

The City believes that a long-range plan has the greatest value when the vision behind it is truly shaped in collaboration with the local community. For this reason, Lowell's Department of Planning and Development sought to engage as broad a sample of the population as possible throughout its public planning process. Using a multi-pronged approach, DPD succeeded in reaching over 1,000 community members over the Spring and Summer of 2011, all of whom offered valuable input on how to make the City more sustainable in the future. During the Fall and Winter of 2011, all of this data was analyzed and compiled into Public Opinion and Existing Conditions Reports.



#### **DRAFT PLAN**

Drawing upon the existing conditions data, as well as lessons learned through the public participation process, a draft plan was developed and presented to the Planning Board and City Council in the Winter of 2012 for initial comment.

#### **PUBLIC COMMENT PERIOD**

Following these presentations, the draft plan was made available to the public for their review and feedback.

#### **FINAL PLAN**

After incorporating feedback from the Planning Board, City Council, and general public, the final plan was presented for adoption and endorsement in the Spring of 2013.

computer lab free of charge to those without computers or internet access at home. The launch inspired 175 community members to sign up and participate, sharing over 1,000 comments about how to improve the city during the two week launch.

- Organization of the Sustainability Snapshots Photography Contest to encourage residents to think about aspects of their city that they would like to be able to pass on to future generations, and to encourage their ownership over and participation in the long-term planning process. As a result, 113 photographs were submitted by the local community for incorporation into the Final Plan.
- Organization of the City's 1st
   Annual Lowell Sustainability
   Week in conjunction with the public planning process as a way to celebrate and promote Lowell's accomplishment's as a green community while engaging residents to think about how they might make their city more sustainable in the future.

SUSTAINABLE LOWELL 2025 vii

# O THE LOWELL FIVE CENT SAVINGS BANK C

**Photo: Norm Caron** 

## **PLAN FRAMEWORK**

A Sustainability Plan is a living document, evolving in response to changing community needs. The process of developing and implementing the plan is, therefore, cyclical in nature. The vision statement informs the goals, which inform the objectives and action areas, which ideally result in the achievement of outcomes identified through the community planning process. As new community concerns arise, the vision and processes take on new forms.



**Photo: Jane Albert** 



**Photo: Mary Cutter** 

# 

**Photo: Donald Hogan** 



**Photo: Deb Forgione** 

#### **VISION STATEMENT**

The vision statement – shaped by both public opinion and practical understanding of development trends impacting the City and region – provides a guiding framework for the document as a whole.

#### **GOALS & ACTION AREAS**

Eight goals have been identified as priorities through the planning process. Each goal chapter contains a series of objectives and corresponding action items.

#### **OUTCOMES**

Twenty-one plan outcomes were identified through the public planning process as key areas in which the community would like to see greater emphasis and investment placed. Charts on the last page of each goal chapter identify how the city intends to achieve these outcomes and meet community needs through the implementation of each chapter's objectives and action items.

viii SUSTAINABLE LOWELL 2025

### vision

LIVABILITY
PLACE-MAKING
LONGEVITY
RESPONSIBILITY

## goals & action areas



SUSTAINABLE NEIGHBORHOODS

**HOUSING CHOICE** 

**MOBILITY & ACCESS** 

**VIBRANT & UNIQUE URBAN HUB** 

HEALTHY & SUSTAINABLE LOCAL ECONOMY



**ENVIRONMENTAL RESILIENCE** 

EFFECTIVE OPERATIONS,
INFRASTRUCTURE, & TECHNOLOGY



**SUSTAINED PUBLIC ENGAGEMENT** 

#### outcomes



HISTORIC CHARACTER & PRESERVATION



HOUSING QUALITY & VARIETY



**PUBLIC HEALTH & SAFETY** 



**SOCIAL EQUITY** 



CIVIC ENGAGEMENT & COMMUNITY PRIDE



RECREATIONAL OPPORTUNITY



MULTI-MODAL TRANSPORTATION



RESOURCE & INFORMATION SHARING



COLLABORATIVE PARTNERSHIPS



**EDUCATION & TRAINING** 



LOCAL ECONOMIC
DEVELOPMENT & INNOVATION



**JOB CREATION** 



TRANSPARENCY & ACCOUNTABILTY



INFRASTRUCTURE INVESTMENT



ENVIRONMENTAL PLANNING & POLICY



NATURAL RESOURCE CONSERVATION



CARBON EMISSION REDUCTION



**ENERGY COST REDUCTION** 



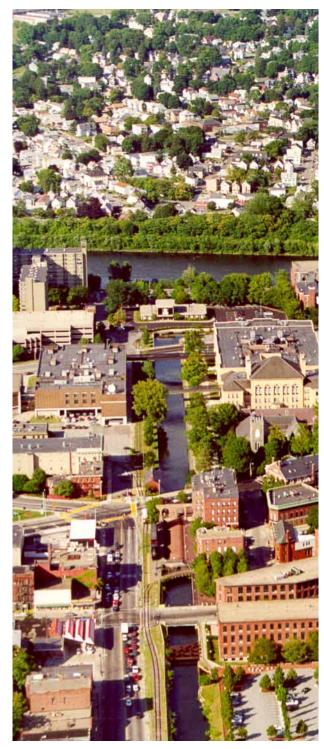
EFFECTIVE & EFFICIENT OPERATIONS



ARTS & CULTURAL INVESTMENT



SHOPPING & ENTERTAINMENT



## **VISION**

Lowell's Sustainability Plan provides a framework for development over the next 10-15 years and establishes a comprehensive and shared vision for the future. It is grounded both in public opinion and practical understanding of development trends impacting Lowell and other Gateway Cities.

As a city that enjoys an authentic urban character and possesses many unique physical, cultural, and social amenities that are attractive to the populations driving growth and development trends across the country, Lowell has the potential to continue serving as a desirable place to live and work for years to come. It is therefore incumbent upon the City to make choices that will enhance its unique assets and appeal particularly to retiring baby boomers, young members of the Millennial Generation, and immigrants moving to and within the country, as these three population cohorts have demonstrated a preference for living in urban as opposed to suburban settings, and will be responsible for nearly all projected growth and migration shifts in America over the coming decade.

The Lowell community, whose insights informed this Sustainability Plan, intuitively understands these trends, as it is itself a reflection of these population shifts. As a result, the shared vision that forms the foundation of this plan is based upon the following principles, which if continually invoked will help position Lowell for economic, social, and environmental success:

Photo: DPD

#### LIVABILITY

Lowell will offer a high quality of life for residents of all backgrounds and stages of life by building upon the strength of its neighborhoods as diverse, accessible communities whose established character is celebrated and preserved, and whose lifestyle amenities are well integrated and readily available.

#### **PLACE-MAKING**

Drawing upon its rich and authentic natural, cultural, institutional, and historical resources, Lowell will serve as a local and regional hub for innovation and sustainable economic development with an unmistakable pride of place and a vibrant urban downtown.

#### **LONGEVITY**

By proactively preparing for and adapting to social, economic, and environmental trends at the local, regional, and global level, Lowell will maintain an effective and innovative municipal government, foster an engaged community, support a diversified and sustainable economic base, and preserve its environmental assets, striving to put policies in place that will endure beyond any given set of leaders.

#### RESPONSIBILITY

Through increased accountability, education, civic engagement, and action Lowell will cultivate a community-wide, shared ethic of sustainability whose implications and merits - for both the present and future - are broadly understood.

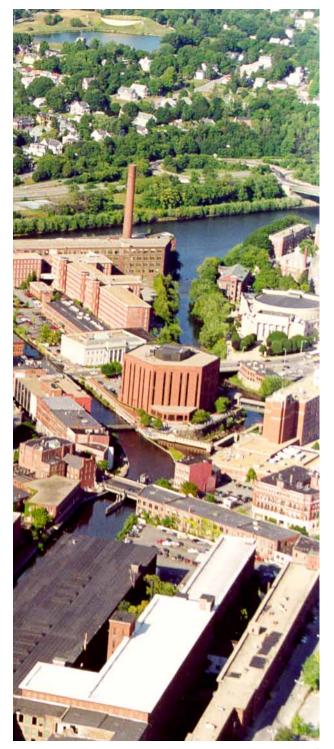
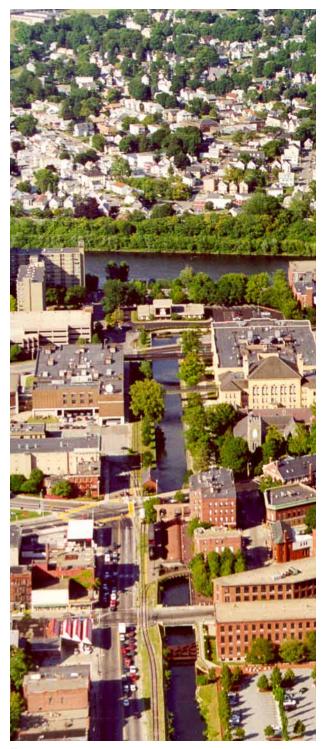


Photo: DPD



## VISION

El Plan de sostenibilidad de Lowell brinda un marco para el desarrollo durante los próximos 10-15 años y establece una visión abarcadora e integral para el futuro. Se basa en la opinión pública y en el entendimiento práctico de las tendencias del desarrollo que impactan a Lowell y las demás Ciudades Portales ("Gateway").

Lowell es una ciudad que disfruta de un carácter urbano auténtico y posee muchas instalaciones y servicios singulares en lo físico, cultural, y social, características que son atractivas a las poblaciones que están impulsando las tendencias de crecimiento y desarrollo a lo largo del país. Como tal Lowell tiene el potencial de seguir sirviendo como un lugar deseable de vivir y trabajar durante los años venideros. Es imperativo entonces que la Ciudad tome decisiones que enriquezcan estos bienes singulares y el encanto de Lowell, particularmente para tres poblaciones cohortes que han demostrado su preferencia de vivir en lugares urbanos en vez de suburbanos: los "baby boomers" (nacidos durante la explosión de natalidad en los años posteriores a la segunda guerra mundial) que se jubilan, miembros jóvenes de la Generación Milenio, e inmigrantes que entran al país o se mudan dentro del mismo. Dichas poblaciones serán responsables de casi todo el crecimiento y los cambios migratorios proyectados en América durante la próxima década.

La comunidad de Lowell, cuyas percepciones informaron este Plan de Sostenibilidad, entiende estas tendencias por intuición y en sí, refleja estos cambios poblacionales. Como resultado, la visión compartida que forma el fundamento de este plan se basa en los siguientes principios. Si se invocan constantemente, los principios ayudarán a colocar a Lowell ante el éxito económico, social y ambiental:

**Photo: DPD** 

#### **HABITABILIDAD**

Lowell ofrecerá una alta calidad de vida para todos(as) los residentes de cualquier lugar y en todas las etapas de la vida, sumando la fortaleza de sus vecindarios como comunidades diversas, acogedoras cuyo carácter establecido se celebre y se preserve, y cuyas necesidades y comodidades diarias se integren bien y sean fácil de accesar.

#### **LUGAR ATRACTIVO E INTERESANTE**

Haciendo uso, acogiendo y enriqueciendo los ricos recursos – naturales, culturales, institucionales, e históricos, Lowell servirá como núcleo local y regional para el desarrollo económico innovador y sostenible con un orgullo inconfundible de lugar y un centro urbano dinámico.

#### **LONGEVIDAD**

Mediante una proactiva preparación para y adaptación a las tendencias sociales, económicas, y ambientales a nivel local, regional y global, Lowell mantendrá un gobierno municipal efectivo e innovador, fomentará una comunidad participativa, apoyará una base económica diversificada y sostenible, y preservará sus bienes ambientales, esforzándose en la fijación de políticas que perduren más allá de cualquier conjunto de líderes.

#### **RESPONSABILIDAD**

A través de mayor transparencia, educación, participación cívica y acción, Lowell cultivará una ética de sostenibilidad que compartirá toda la comunidad, cuyas implicaciones y méritos – tanto para el presente como el futuro, sean ampliamente comprendidos.

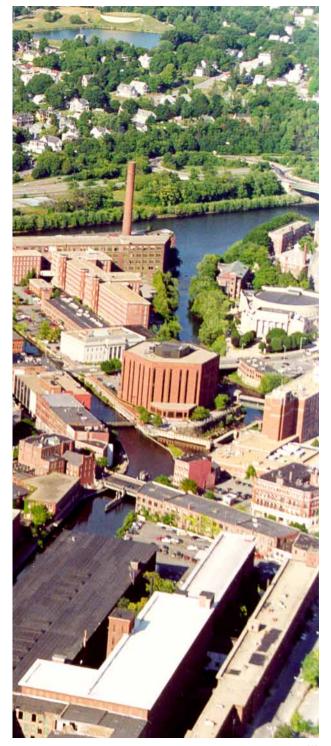
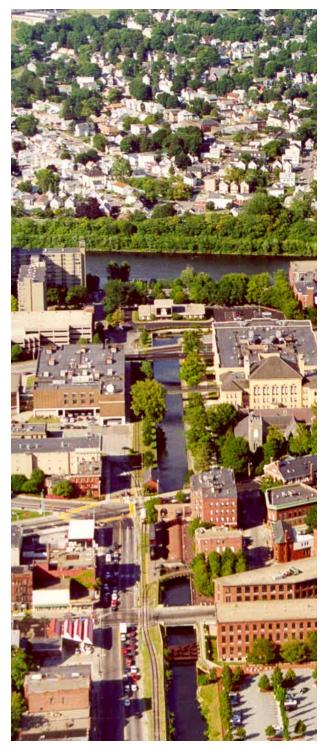


Photo: DPD

SUSTAINABLE LOWELL 2025 x



# *ซลยู่ธิธย*

គមោងការរកសឲ្យមានទទង់របស់កុងឡ វែល ្រផ7ល់នូវគមោងសំរាប់ការអភិវឌ ន៍ក្នុងរយ៉ពេល ១០-១៥ផ្នាំខាងមុខ ហើយបងេី តចកឱ្យវិស័យទូលំទូល៉ាយនិងចែករំលែកសំរាប់អនាគត។ វាតូវបានបង ាញបាប់គោលការណ៍ជាមូលដ½ានសំខាន់ ទាំងយោបល់សាធារណ៏និងទាំងការយល់ដឹងពិតបាកដ«ននិន្នាការអភិវឌ្ ន៍មាន²ទ ិពលលើកុងឡ វែល ្រនិងផ្សាវចូលទីកុងផេ6ង ឡេត។

ជាទីកុងដែលសបលយរីករាយនឹងលក់ឱ្យហ៉ូទីកុងដែលគឹមគូវតាមចលប់ ហើយមានកនៃង្រធម្មជាតិ, វប០ធម , និងសង មខុសបែក្រពីគេជាចើន ដែលធើ ឲ្យបជាពលរដ½ចាប់អារម្មណ៍ បណ់7លឲ្យកំណើន និងនិន្នាការអភិវឌ្ធ ន៍ពាស់ពេញបទេស, ឡ វែល្ប មានសក7រនុពលបន7បំរើការដូចជាក់នៃង្រគួរចង់រស់នៅ និងកនៃង្រធើការចើនឆ្នាំទៅមុខទៀត។ ហេតុដូច្នេះ វាគឺជា ភារ៉ាកិចាះទីកុងធើ ការជើសជីសដែលនឹងធើ ឲ្យអត បយោជន៍បែក្រពីគេបស់រឡើង ហើយធើ ការអំពាវនាវដល់អ្នកចូលនិវត7, សមាជិកក្មេងៗ«នជំនាន់សហសថវត6, និងជនអនេ7របវេសន៍ ផ្យាស់ទីកន្សែងមករស់នៅ ហើយនៅក្នុងបទេស, ពោះថា បជាពលរដ½ទាំងបីកុមនេះ បានបង រញាការចាប់អារម្មណ៍រស់នៅក្នុងទីកុងជាជាងរស់នៅជាយកុង, ហើយនឹងគូវទទួលខុសគូវ សំរាប់គំរោងកំណើនសេពី្តរតែទាំងអស់ ហើយនិងទេសនករបវេសន៍ថាក់សំប7 រនៅក្នុងបទេសអាមេរិកចើនទសវតេស៍ខាងមុខទៀត។

សហគមន៍ ឡ វែល, ការយល់ផ្ទុះជោរបស់កុងបានផ7ល់ពត មានពីគមោងការដែលអាចរកឲថ្យមានទទង់បាននេះ, ការយល់ដឹងនិន្នាការទាំងនេះតាមសភាវគតិ, ដូចជាការផ្ទុះបញ្ជាំងខ្សួន ង «នការផ្យាស់ប7 រចំនួនបជាពលរដ½។ ហេតុដូច្នោះហើយ, ចកឱ្ធវិស័យចែករំលែកដែលបង៉េ តមូលដ½នេគិះ«នគមោងការនេះ យោលទៅលើគោលការណ៍ខាងកោម, បសិនបើបានយកមកបើ ម7ងហើយម7ងទៀត នឹងជួយស ានភាពជំហរកុងឡ វ៉ែលឲ្យមានភាពជោគជ័យខាងសេដ½កិចាះ, សង ម, និងបរិស ាន

Photo: DPD

#### ភារអាចរស់នៅបាន

ឡ វែល ្រនឹងផ7ល់ជូននូវគុណភាពជីវិតដ៏ខ ស់សំរាប់អ្នករស់នៅជាអចិ«ន7យ៍ គប់សាវតានិងគប់ដំណាក់កាលជីវិតទាំងអស់ ដោយអាស័យលើភាពរឹងមាំ«នសង រត់រស់នៅរបស់កុង ដែលជា សហគមន៍ផេ6ងៗគ្នា, សហគមន៍អាចចូលទៅដល់បាន ដែលកិត7ិនាមបានបងើតឡើង គួវបានកោតសរសើរ និងរកឲទុកឲ្យមានសុវត7ិភាព ហើយកនៃង្រដែលមានរប្យេបរស់នៅគួវបានធើ សមាហ័រណយខាងល់បសើរ ហើយបើបាស់ឲ្យជាបយោជន៍បានយខាងងាយសួល។

### หเฉาอหเกอ

ការធេីនិសឲារណកម្មធម្មជាតិដែលសម០ ណ៍បែបនិងតិមតូវតាមចហប់, ធនធានវប០ធម , ធនធានវិជ្យាស ាន, និងធនធានបវត7ិសាស7, ឡ វែល្ប នឹងបំរើការជាមជ្ជមណ្ឌលមូលដ½ននិងភូមិភាគ ឲ្យមានការបឌិតញាណ និងការអភិវឌ្ធ ន៍សេដ½កិចាៈដែលអាចរកសឲ្យមានទទង់បាន ជាមួយនឹងកន្លែងដែលមានមោទនភាពចហស់លាស់ ហើយនិងមណ្ឌលកុងដែលគួរឲ្យចាប់អារម្មណ៍ «កំលែង។

#### និយាយភាព

ដោយការរៀបចំសកម្មភាពជាមុន និងការសមបសមួលទៅតាមនិន្នាការសង ម, សេដ½កិចាះ, និងបរិស នេនៅមូលដ½ន, ភូមិភាគ, និងទូទាំងពិភពលោក, ឡ វែល ្រនឹងរកសរដ½រភិបាលកុងដែល មានបសិទ ភាពសមរមនៃងដែលបឱ្យគញាណ, ជួយឲ្យចំរើនខាងការចូលរួមសហគមន៍, ជួយគាំទមូលដ½នេសេដ½កិចាះបែបផេ6ងៗគ្នានិងអាចរកសឲ្យមានទទង់បាន, និងរកសទុកទពសៃម០ត7ី បរិស នេឲ្យមានសុវត7ិភាព, ខិតខំបឹងបែងរកស់ទុកចលប់បតិបត7ិដែលនឹងនៅបិតថេរកោយពេលមានអ្នកដឹងនាំជំនាន់កោយៗ។

#### *ភារធធួលខុសតូចយន់នោនប*

តាមរយ៉ាកំណើនភាពទទួលខុសតូវ, ការសិកឲាអប់រំ, ការចូលរួមកិចាះការនិតិរដ½, និងសកម្មភាព ឡ វែល្ប នឹងជោមជែងឲ្យមានភាពទទង់សហគមន៍ទាំងមូល, ចែករំលែកសីលធម «នការ រកឲឲ្យមានទទង់ ដែលមានការជាប់ពាក់ព័ន និងភាពតិមតូវ – សំរាប់ទាំងបចាះ្ជបល្ននិងទាំងអនាគត – គឺតូវយល់ដឹងជាទូទៅ។

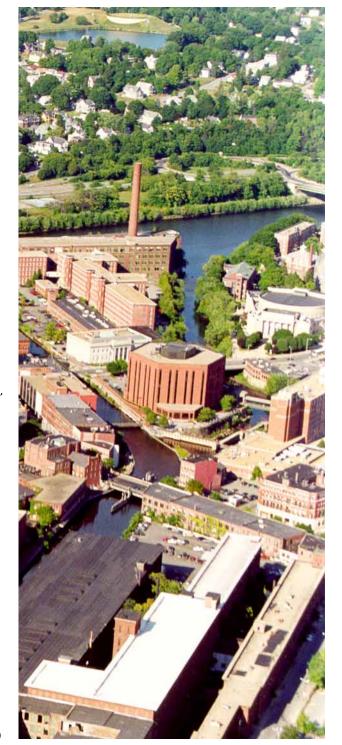
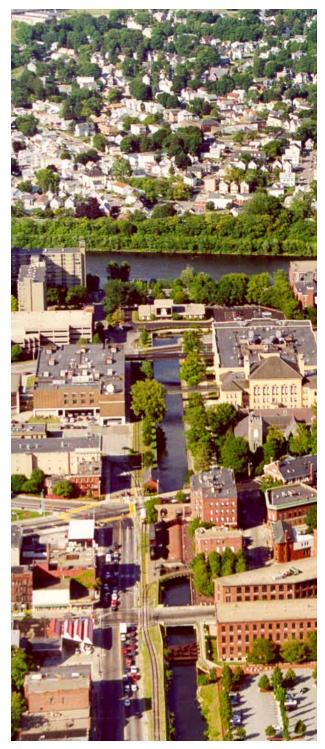


Photo: DPD



## **VISÃO**

Plano de sustentabilidade de Lowell fornece uma estructura de desenvolvimento nos próximos 10-15 anos e estabelece uma visão global e compartilhada do futuro de Lowell. Esta visão baseia-se não só na opinião pública geral mas também na compreensão práctica das tendências de desenvolvimento em Lowell e outras cidades consideradas "Gateways".

Como uma cidade que goza de um autêntico carácter urbano e possui muitas amenidades únicas físicas, culturais e sociais que são desejáveis aos segementos da população em crescimento em todo o país, Lowell tem potencial para continuar servindo como um lugar desejável para viver e trabalhar. Cabe, portanto, á cidade de fazer decisões para aperfeiçoar o seu património e atrair em particular as gerações de aposentados: "baby boomers", os jovens membros da geração milenar, e imigrantes vindos de outros países ou de outras partes do país, como estes três grupos da população demonstram uma preferência para viver nos centros urbanos em oposição ás áreas suburbanas, e serão responsáveis pela crescimento populacional projectado e responsáveis pelas trajetórias migratórias na América na próxima década.

A Comunidade de Lowell, cujas ideas informaram este Plano de Sustentabilidade, intuitivamente compreende estas tendências, como ela própria é um reflexo destas alterações populacionais. Como resultado, a visão compartilhada que constitui a fundação deste plano baseia-se nos seguintes princípios, que posta em práctica ajuda Lowell a posicionar-se para o sucesso económico, social e ambiental:

Photo: DPD

#### **HABITABILIDADE**

Lowell vai oferecer uma qualidade de vida elevada aos seus residentes de varias circunstâncias familiares e etapas de vida atravês do potencial dos seu quateirões diversos, acolhedores, saudáveis e acessíveis onde habitação, transporte, recreação, educação, emprego, como também necessidades diárias e comodidades de vários estilos de vida são facilmente accessíveis e bem integrados, e onde as características dos quarteirões são comemorados e perservados.

#### **LUGARIZAÇÃO ("PLACE-MAKING")**

Tirando partido, acolhendo, e melhorando os seus ricos recursos naturais, culturais, institucionais e históricos, Lowell servirá como um centro local e regional de inovação e desenvolvimento económico sustentável, com inconfundível senso de orgulho do espaço urbano e centro da cidade vibrante.

#### **LONGEVIDADE**

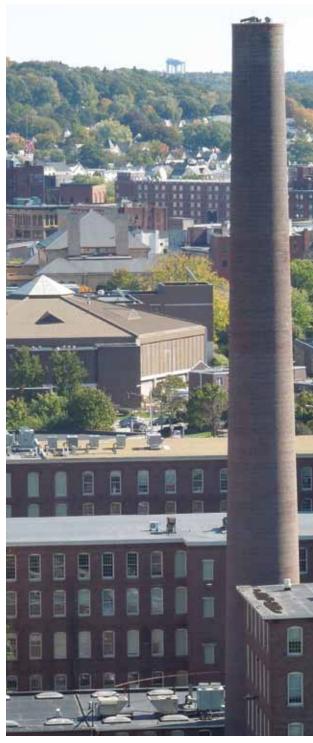
Por proativamente se preparar e adaptar à evolução social, econômica e ambiental, a nível local, regional e global, Lowell vai manter um governo municipal eficaz e inovador, promoverá uma comunidade colaboradora, apoiará uma base económica diversificada e sustentável, e preservará seus recursos ambientais, se esforçando por adoptar um plano que endure futuros líderes politicos.

#### **RESPONSABILIDADE**

Através de maior responsabilidade, educação, participação cívica e acção, Lowell cultivará uma ética comunitária, compartilhada e sustentável, cujas implicações e méritos - para o presente e o futuro é amplamente compreendida.

Photo: DP

SUSTAINABLE LOWELL 2025 xv



## **COMMUNITY OVERVIEW**

#### **HISTORY**

Throughout its history, Lowell has drawn upon its natural and cultural resources to facilitate its growth and development. The City's location at the confluence of the Merrimack and Concord Rivers initially attracted settlers to its banks 10,000 years ago. Lowell served as an ideal place for Native American fishing camps, and later on, floodplain farming by the English. Incorporated in 1826 as America's first, large-scale planned industrial community, Lowell became emblematic of the country's transition from a rural agrarian to an industrial society, utilizing its rivers and canals to provide inexpensive, reliable waterpower for the mills, and as a means of transport to nearby communities for trade.

Lowell's industrialization was among the most rapid the country ever saw. Its mills helped transform American life with the rise of the large corporation, the growth of an urban working class, and the influx of immigrants to an increasingly diversified community. By 1840, Lowell had become the principal manufacturing center of the United States, and by the 1860s, the industrial system could not keep pace with the very forces it had generated. Shortly after the turn of the 20th century, the use of alternative forms of power Photo: DPD

production became widespread and many aging textile mills were forced to move south, where raw materials and labor were less expensive. As a result, Lowell's mills fell into disrepair and its economy began to stagnate.

Since the 1970s, however, Lowell has seen a remarkable rebirth and revitalization. The designation of the Lowell National Historical Park as the first urban National Park, along with complementary local and state efforts to promote historic preservation, heritage tourism, and economic renewal stimulated a restoration of the Downtown. The early 1980s wave of immigration, especially from Southeast Asia, Africa, and Latin America, has enabled Lowell to carry on its proud tradition of drawing upon the vitality of its immigrant communities. More recently, through the diversification of its local economy, the City's job base has broadened beyond its traditional manufacturing core. Emerging technology, education, healthcare, and creative economy sectors have contributed to Lowell's recent vibrancy and renewed spirit of innovation. As Lowell transitions into the 21st century, it continues to value its rich natural and cultural treasures, honoring its past while looking ahead towards a more sustainable future.

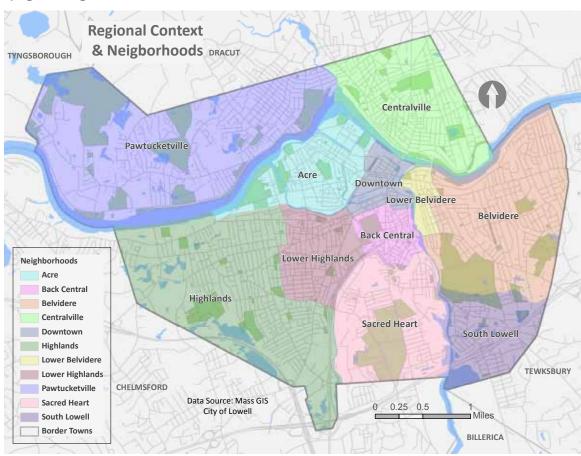
xviii SUSTAINABLE LOWELL 2025

## A SNAPSHOT OF LOWELL TODAY

#### **REGIONAL CONTEXT**

Lowell's geography and regional locale are unique in a number of ways. The City serves as an urban oasis for the largely suburban communities that surround it, including Tewksbury, Chelmsford, Dracut, Billerica, and Tyngsborough, and is also located at

the convergence of an extensive network of waterways. Similarly unique are the City's neighborhoods. Each with its own distinct history, character, and evolution, they are amongst Lowell's greatest assets.



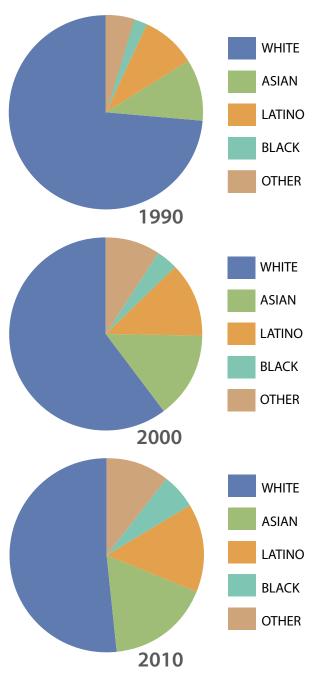
#### **POPULATION**

With a 2010 population of 106,519, Lowell is currently the 4th largest city in the Commonwealth. Although predominantly built-out, the City has continued to witness incremental, but steady, population growth over the past several decades, and is once again nearing the size it was during its industrial peak in the 1920s.

YEAR	POPULATION
1900	94,969
1910	106,294
1920	112,759
1930	100,234
1940	101,389
1950	97,249
1960	92,107
1970	94,239
1980	92,418
1990	103,439
2000	105,167
2010	106,519

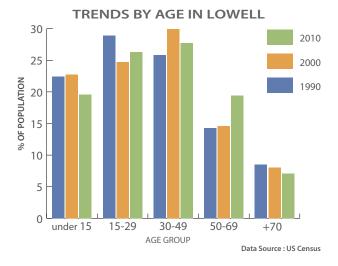
Data Source: U.S. Census

#### LOWELL'S ETHNIC GROWTH



#### **Density**

As of 2010, Lowell had a population density of 12.1 persons per acre, an increase of 15.3% since 1980. Since 1970, Downtown has seen the greatest increase in density, with an increase of 512%. Other areas with relatively high population densities include Back Central (26.6 p/a), the Lower Highlands (25.5 p/a), and portions of the Acre (30 p/a).



#### Age

While no age group dominates the population of Lowell, over the past 20 years, the most notable change in the age of the population of the City has occurred with those between the ages of 50-69. While this cohort represented 14.3% of the population in 1990, it had grown to 19.4% by 2010. Other significant patterns since 1990 include a 10% decrease in the population of persons under the age of 15 and a 15% decrease in the population over the age of 70.

#### **Ethnicity**

The most predominant change has occurred with the City's ethnic population, which has doubled in the span of just two decades. In 1990, Lowell's ethnic population consisted of 23.5% of the total population, whereas it represented 47.2% in 2010. Although White residents currently make up the largest population within the City, they are the only group with a declining population. According to the Brookings Institute, this phenomenon is also occurring at the national level. By 2042, the nation will become majority persons of color, and the White population will become the minority.

**Data Source: U.S. Census** 



Similarly to other gateway cities, the majority of Lowell's land has been developed for residential use. However, the percentage of land dedicated to residential development in Lowell (63.2%) exceeds the average percent dedicated by the other communities (59%). The percentages of land allocated for other types of uses, such as industry and recreation, are similar as compared with its peers.

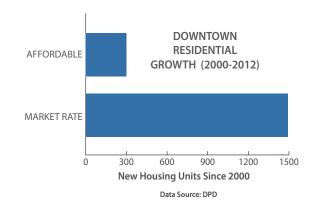
#### **HOUSING**

Housing trends in Lowell have tended to mirror those throughout the Commonwealth. While the City saw a significant housing boom in the early 2000s, with an increase in home prices and an influx of new residents. the national foreclosure crisis coupled with high unemployment rates has significantly impacted the housing market in recent years.

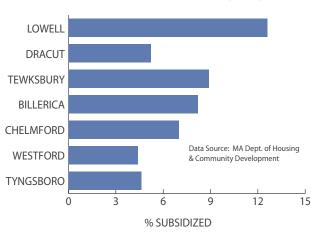
In spite of these challenges, the City's Downtown has experienced tremendous growth since 2000 as a result of significant redevelopment efforts, with over 1,500 market rate and 300 subsidized units being added to existing housing stock. Other neighborhoods experiencing high percentages of new construction include Pawtucketville and the Highlands.

With nearly 50% of Lowell's housing stock having been built before 1940, the City recognizes the value of supporting redevelopment projects, particularly in cases where planned improvements result in safer, higher-quality, and more energy efficient homes for Lowell residents.

Lowell remains one of only a handful of communities that exceeds the State's goal of 10% affordability under MGL Chapter 40B, thereby providing housing to assist low-income residents in need. According to the Department of Housing and Community Development's Subsidized Housing Inventory, Lowell subsidizes 12.6% of all its residential units, a far greater percentage than most communities, including its neighbors.



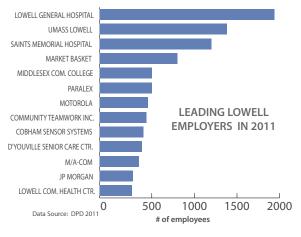
#### SUBSIDIZED HOUSING IN LOWELL **AND SURROUNDING TOWNS (2010)**

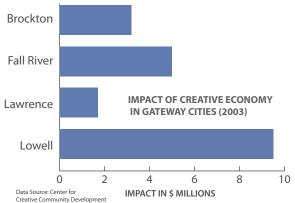


	LOWELL		LAWRENCE		NEW BEDFORD		SPRINGFIELD		WORCESTER		AVERAGE	
	ACRES	%	ACRES	%	ACRES	%	ACRES	%	ACRES	%	ACRES	%
RECREATION	318	4.6	103	2.7	422	5.3	643	4.2	954	5.5	530	4.8
TRANSPORT	283	4.0	154	3.9	672	8.4	623	4.0	1,133	6.6	646	5.81
WASTE	17	.25	0	0	85	1.1	38	.2	29	.2	38	.3
INDUSTRIAL	621	8.9	556	14.4	822	10.3	1,187	7.7	12.8	7.4	961	8.6
URBAN PUBLIC	749	10.7	420	10.9	840	10.6	1,715	11.1	2,094	12.2	1,267	11.4
COMMERCIAL	573	8.2	416	10.8	734	9.2	1,608	10.4	1,507	8.8	1,066	9.6
RESIDENTIAL	4,410	63.2	2,220	57.3	4,380	55.1	9,614	62.3	10,188	59.2	6,600	59.4
TOTAL DEVELOPED LAND	6,972	75.1	3,868	81.3	7,955	61.6	15,428	72.9	17,186	69.9	11,109	70.0

**Data Source: MassGIS** 

**SUSTAINABLE LOWELL 2025** xxi





YEAR

#### **ECONOMY**

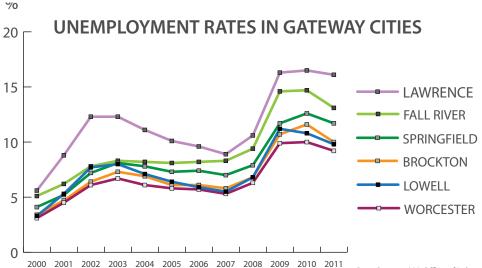
Over the course of the past decade, Lowell and the surrounding Merrimack Valley region have been impacted by shifts in the nation's economy. In spite of a national recession which prompted a rise in unemployment rates, however, Lowell has fared well in comparison to other gateway cities, and has continued to make strides in growing a healthy and sustainable local economy. Employment in the City has increased and the City's unemployment rate has fallen as the recession has waned.

Significant redevelopment has occurred Downtown and within the Hamilton Canal

District, bringing new residents with disposable income to support the growing number of Downtown restaurants and retail shops. Lowell has diversified its economic base from its traditional manufacturing roots to more

knowledge based industries, including technology, health care, education and service sectors. Amongst the City's leading employers are local hospitals, institutions of higher education, and high tech companies. The growth of UMass Lowell's student population in particular has contributed to a greater sense of vibrancy throughout the City and to an emerging identity of Lowell as a college town.

Lowell's creative economy has also grown substantially over the past 10 years with the development of hundreds of new artist live/ work spaces and the emergence of dozens of creative businesses. Lowell has continued its tradition of welcoming immigrants to the City, many of whom bring with them a strong spirit of entrepreneurship, which has been made visible throughout the City. The City's diverse cultural community, comprised of dozens of galleries, museums and other creative organizations, has continued to support the presentation of over 200 annual festivals. attracting over 3 Million visitors to the city each year. All of these factors have helped contribute to an annual economic impact of \$9.5 Million in Lowell as a result of cultural activity.



Data Source: MA Office of Labor & Workforce Development

xxii SUSTAINABLE LOWELL 2025

#### **ENVIRONMENT**

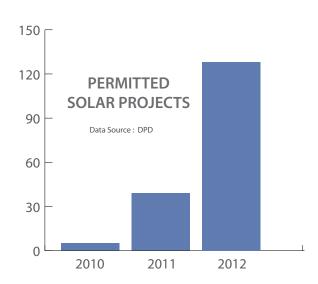
In the past ten years, Lowell has successfully modeled ways that older, industrial cities can integrate historic preservation with environmentally sustainable development. In 2011, the City received accolades from the State's Department of Energy Resources as a 'Leading by Example' award recipient, and continues to serve as a leader in renewable energy and energy efficiency investments, brownfields redevelopment, and transitoriented development. Improvements to water quality and increasing support for local food access have also contributed to Lowell's emerging identity as a sustainable community.

Consistent with its heritage, Lowell continues to be a leader in the production of renewable energy, with nearly 30 Megawatts of solar-and hydropower production capacity. Public and private investment in solar technologies in particular has increased tremendously in recent years. As a component of Lowell's \$21 Million performance contract, the City has made renewable energy and energy efficiency enhancements in 47 city owned buildings,

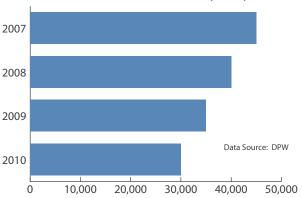
including installing solar arrays on four public schools and the Lowell Memorial Auditorium. The number of privately funded solar projects has also grown significantly, leaping from 5 projects in 2010 to over 125 in 2012.

Since the City transitioned to a new bin collection system in 2008, the annual tonnage of solid waste being collected citywide has been reduced from 45,000 to 30,000, and recycling has increased proportionally.

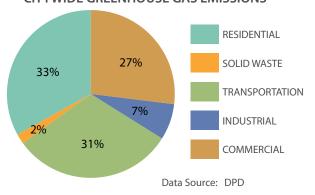
Although Lowell has made great strides over the past decade to better preserve and protect its natural environment, further reduction of greenhouse gas emissions still remains a high major priority. A Greenhouse Gas Analysis conducted in 2008 by the Department of Planning and Development found that the majority of emissions were generated by transportation uses and commercial and residential properties. By implementing the goals and objectives laid out in this plan, however, the City is confident that Lowell will continue to reduce its emissions and leave its environment in a better condition for future generations.







#### **CITYWIDE GREENHOUSE GAS EMISSIONS**



SUSTAINABLE LOWELL 2025 xxiii



## A DECADE OF SUSTAINABILITY ACCOMPLISHMENTS (2003 – 2012)

- 2011 Recipient of the Commonwealth Department of Energy Resources' 'Leading by Example' Award
- Over 29 MW of Renewable Energy Generated
- 47 City-owned Buildings have had Renewable Energy and Energy Efficiency Enhancements Made through a \$21M Performance Contract
- \$12.2 Million Invested in Private Commercial and Residential Solar Arrays
- 500,000 Square Feet Downtown Historic Commercial Space Retrofitted for a Projected Energy Savings of 31% through the Department of Energy's Better Buildings Program
- 33% Energy Reduction at the Lowell Regional Waste Water Utility through Energy Enhancements
- Public Electric Vehicle Charging Station Installed Downtown

- 9 Solar Arrays Installed on Municipal Facilities, Producing Enough Electricity to Power 850 Homes Over the Next 20 Years
- 33% Reduction in Solid Waste Tonnage through New Bin Collection System
- \$9.5 Million Economic Impact of Lowell's Creative Economy with dozens of Creative Businesses and over 200 Artist Work Spaces
- 75 Acres of Land Investigated for Brownfields redevelopment since 1996
- 34 Lane-Miles of Roadway Incorporate Bike Lanes and Sharrows
- 3rd Largest Transit Authority Fleet in Massachusetts using Clean Air Natural Gas and Hybrid Electric/Diesel Buses
- 100% Traffic Lights Converted to LED
- One of the first communities in MA to Adopt the Stretch Energy Code and become Certified as a Green Community

**Photo: Bob Philpot** 

xxiv SUSTAINABLE LOWELL 2025

## SUSTAINABLE NEIGHBORHOODS



owell will support the development of sustainable neighborhoods, which foster a sense of community cohesion and promote healthy lifestyles by design. Such neighborhoods will be welcoming and wellnetworked, connecting residents with the natural and built environment, with the city's rich history, with educational and work opportunities, with convenient transportation access and healthy homes, and with other daily amenities, such as recreational opportunities and local food. They will carefully balance the energizing benefits of new investments with the thoughtful preservation of neighborhood character.

Photo: CBA

## VECINDARIOS SOSTENIBLES

Lowell apoyará el desarrollo de vecindarios sostenibles que fomentan un sentido de cohesión comunitaria y promuevan estilos de vida saludables. Tales vecindarios serán acogedoras y bien enlazadas para que los(as) residentes se conecten con los entornos naturales y construidos, con la rica historia de la ciudad, con oportunidades laborales y educativas, con acceso conveniente al transporte y viviendas saludables, y con otras comodidades diarias tales como oportunidades recreativas y comida local. Cuidadosamente balancearán los beneficios energizantes de nuevas inversiones con la preservación bien meditado del carácter de los vecindarios.

# អាអោចអាស្លាត់សំនៅបាន QUATEIRÃOS SUSTENTÁVEIS

ឡូដែល្អ នឹងគាំទ្រការអភិវឌ្ឍន៍នៃការអាចរក្សាសង្កាត់រស់នៅបាន, ជួយឲ្យចំជីនប្រយោជន៍នៃការរួមកម្លាំងសហគមន៍ និងលើកកម្ពស់ របៀបរស់នៅដែលមានសុខភាពល្អ ដោយមានគោលបំណងរៀបចំ ឡើង។ សង្កាត់រស់នៅដូចនេះ នឹងត្រូវស្វាគមន៍ និងមានបណ្ដាញយ៉ាង ល្អប្រសើរ, តភ្ជាប់អ្នករស់នៅជាអចិន្ត្រៃយ៍ជាមួយនឹងបរិស្ថានធម្មជាតិ និងបរិស្ថានដែលបានស្ថាបនា, ដោយមានប្រវត្តិរបស់ក្រុង ដែល សម្បូរណ៍បែប, ដោយមានឱ្យកាសខាងការសិក្សាអប់រំ និងការងារ, ដោយមានដំណើរការដឹកជញ្ជូនយ៉ាងងាយស្រួល និងគេហដ្ឋានមាន សុខភាពល្អ, ហើយដោយមានភាពជាទីគាប់ចិត្តប្រចាំថ្ងៃផ្សេងទៀត, ដូចជាឱ្យកាសលំហែកាយ និងម្ហូបអាហារប្រចាំតំបន់។ ទាំងអស់នេះ នឹងធ្វើឲ្យផលប្រយោជន៍របស់ការវិនិយោគថ្មីមានតុល្បភាព ដោយ មានគំនិតរក្សាការពារនៃលក្ខណៈសង្កាត់រស់នៅ។

Lowell apoiará o desenvolvimento de quateirãos sustentáveis, que promoverão um senso de coesão da Comunidade e estilos de vida saudáveis. Estes quateirãos serão acolhedores e acessíveis, conectando residentes com o ambiente natural e construído, com o patromónio cultural rico da cidade, com oportunidades de educação e emprego, com acesso conveniente aos transportes e habitação saudável e com outras amenidades diárias, tais como oportunidades de lazer e gastronomia local. Estes elementos irão cuidadosamente equilibrar os benefícios de energização de novos investimentos com a preservação do caráter do bairro.

## **OBJECTIVES**

1	Preserve the unique quality and character of each of Lowell's neighborhoods.
2	Promote safe and welcoming neighborhoods.
<b>2 3</b>	Prioritize land-use policies that promote walkable, well-networked neighborhoods.
4	Support vibrant neighborhood business districts that are easily accessible to al residents.
5	Cultivate schools as models for community cohesion and self-sufficiency.
6	Foster neighborhood-level camaraderie, advocacy, and resource sharing.
7	Ensure the integration of nature, green space and high quality recreational resources into the urban landscape.
8	Celebrate, improve, and activate waterfront resources.
9	Develop policies and programs that facilitate the production, distribution, and consumption of locally grown food in the greater Lowell region.



Suburban

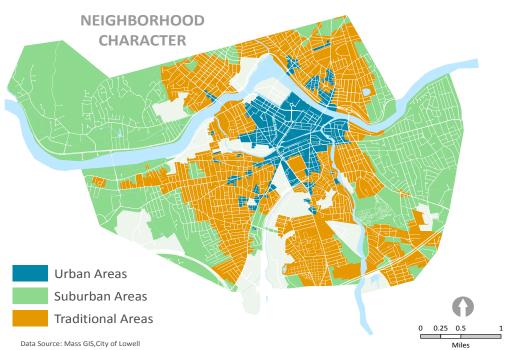
**Traditional** 



Urban

## PRESERVE THE UNIQUE QUALITY AND CHARACTER OF EACH OF LOWELL'S NEIGHBORHOODS.

- Work with community stakeholders to identify neighborhood characteristics to be protected, preserved, and enhanced.
- Encourage the legislature to amend the Community Preservation Act to make local adoption more viable in low- and moderate-income urban communities like Lowell as a tool for protecting and strengthening neighborhood character.
- Offer programming and technical assistance to increase appreciation of Lowell's rich historical assets and architecture.
- Improve the appearance of public squares and facilities through communitysupported initiatives such as Adopt an Island.
- Wherever feasible, develop unique signage, seating, lighting, trash and recycling receptacles, and other public infrastructure for each distinctive neighborhood.
- Continue to reform zoning codes to align with evolving and emergent community needs, land uses, and types of neighborhood character.
- Provide examples of sustainable design guidelines for private properties and public spaces that remain in keeping with the historic character of neighborhoods.



- new neighborhood plans in collaboration with the local community.

Routinely update, implement and develop

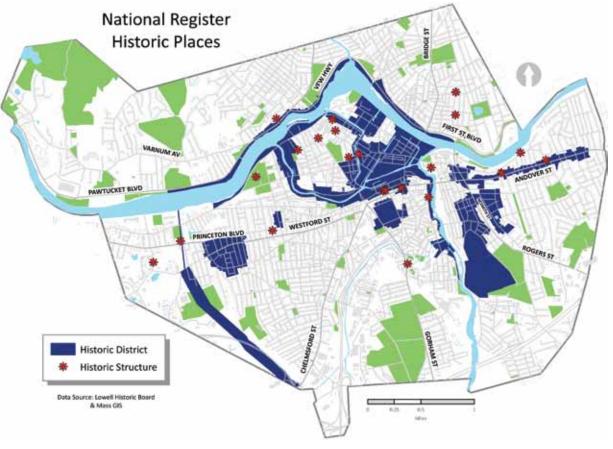
support to land-use boards, seeking to communicate information relative to the project proposal's context so as to ensure that a project's surroundings are respected and taken into account.

Provide clear, professional and consistent

- Monitor and identify trends in variance and waiver grants in order to evaluate the impact of approved projects.
- Maintain existing public streetscape infrastructure and landscaping, partnering with volunteer and community groups wherever possible to reduce costs and leave the neighborhoods in better condition once construction activities are complete.
- Maximize consistent, fair and equitable enforcement of City codes and ordinances.
- Explore creative approaches to lessening the impact of auto-service establishments on residential and mixeduse neighborhoods.

Improvements at Moulton Square







Several neighborhood groups have participated in the "Lights On, Crime Off" campaign which encourages residents to leave on their porch lights as a way to deter crime.

Photo: Coalition for a Better Acre

#### PROMOTE SAFE AND WELCOMING NEIGHBORHOODS.

- Prioritize community policing strategies that increase the visibility and accessibility of officers and build resident trust.
- Continue to allocate staffing resources based on data-driven practices, such as crime mapping to identify hot spots.
- Identify locations and seek funding for new or improved public safety facilities.

- Develop a marketing campaign to promote Lowell as a safe place to live and work.
- Continue to occupy vacant storefronts with police sub-stations.
- Ensure that streets are well-lit with energy efficient lighting that is well-maintained.
- Encourage neighborhood and community groups to establish crime watch campaigns.
- Develop and prioritize design practices for public and private spaces that provide a sense of safety and discourage criminal activity.
- Identify creative solutions to prevent illegal dumping.
- Continue to implement policies and target resources to minimize the negative impact vacant and foreclosed homes have on neighborhoods.

**Acre Neighborhood Precinct Station** 





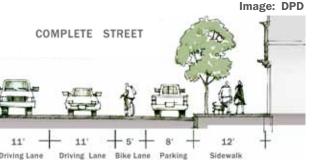
## PRIORITIZE LAND-USE POLICIES THAT PROMOTE WALKABLE, WELL-NETWORKED NEIGHBORHOODS.

- Adopt and implement a Complete Streets policy to accommodate and encourage multi-modal transportation use.
- Develop and utilize public squares and gathering spaces to foster social connections.
- Enhance the pedestrian environment and encourage walkability by adapting landscaping requirements for new development projects.
- Improve the quality of the pedestrian experience in neighborhoods that are well-suited for walking by addressing existing property maintenance concerns, reducing fencing, planting additional street trees, increasing the removal of snow from sidewalks, preventing parking on sidewalks, and improving the physical condition of sidewalks.
- Revise zoning requirements to support the trend towards increased telecommuting and home-based businesses in a manner which preserves the residential character of Lowell's neighborhoods and prevents the commercialization of established residential areas.

- Explore the creation of a new commercial zoning district for areas that are not well-aligned with either Regional Retail or Neighborhood Business.
- Encourage mixed-use development, where it will enhance the viability of neighborhood commercial districts, add amenities to neighborhoods, and/or be consistent with historic land use patterns that helped shape and define certain neighborhoods.
- Develop a more sophisticated approach to parking regulation based upon market demand and economic principles in appropriate locations rather than relying on minimum requirements as the sole regulatory tool in all areas of the City.
- Strive to increase connections between various neighborhoods and the downtown, as well as the connections within and between each neighborhood.



**Photo: Sharon Pruitt** 





# Delicias Paisas

Before and After Views of Delicias Paisas Restaurant
Photos: DPD

## SUPPORT VIBRANT NEIGHBORHOOD BUSINESS DISTRICTS THAT ARE EASILY ACCESSIBLE TO ALL RESIDENTS.

- Conduct regular neighborhood business district inventories and audits to map assets, monitor vacancy rates, determine which types of businesses to attract, and improve the general vitality of the areas.
- Encourage a diversity of retail options within business districts that will provide local jobs and reinforce the livability of surrounding neighborhoods.
- Encourage the development of strong neighborhood business associations.
- Continue to work with economic development partner agencies to maintain existing small business assistance and incentive programs, and increase the outreach and marketing of these programs in neighborhood business districts.
- Encourage local businesses, institutional partners, and community members to organize and take part in "buy local" initiatives.
- Develop design standards that preserve and enhance neighborhood business districts as vibrant, walkable places, and implement development regulations that are most effective in meeting those standards.







**Highly Visible Business Signage** 

Photo: DPD

- Improve the appearance of business signage through the update of the existing sign code, expanded support of the Sign and Façade program citywide, and the strengthening of code enforcement efforts.
- Provide free public Wi-Fi in neighborhood business districts to attract creative entrepreneurs and others that will establish a culture of innovation citywide.
- Fill vacant storefronts with pop-up galleries, satellite libraries and/or public art.
- Increase the amount and variety of outdoor public seating in neighborhood business districts, where appropriate.



Proposed Exterior Renovations for Neighborhood Market Image: DPD



Photo: DPD



**Photo: City Sprouts** 



**Photo: Sean Dreilinger** 



## CULTIVATE SCHOOLS AS MODELS FOR COMMUNITY COHESION AND SELF-SUFFICIENCY.

- Create a culture of high expectations and shared ownership for student achievement by working proactively to involve families and partnering organizations in the students' school life.
- Continue to explore changes to the school assignment policies that reduce busing distances and increase the number of students assigned to schools they can walk to.
- Support a broad range of education options for Lowell families, including charter schools, parochial schools, and other private schools, while striving to also offer the best urban public schools in Massachusetts.
- Explore the adoption of joint-use agreements and resource-sharing with community partners to expand available services.

- Utilize school spaces, including gymnasiums, auditoriums, cafeterias, health clinics, libraries, school yards, and classrooms for broader community purposes on nights and weekends.
- Maintain existing after school and summer programs and expand programming where feasible.
- Prioritize infrastructure improvements around schools for enhanced pedestrian accessibility.
- Capitalize on schools as learning labs for sustainability, drawing upon renewable energy, energy efficiency enhancements, and school gardens as educational tools which improve public health and operational efficiency.

With 94 programs spanning 217 Massachusetts school districts, the ever-expanding "Farm to School" program is a cost-effective way to support healthy lifestyles in our schools.

Photo: Mass Farm to School

#### FOSTER NEIGHBORHOOD-LEVEL CAMARADERIE, ADVOCACY, AND RESOURCE-SHARING.

- Develop asset maps of community resources so as to more effectively foster collaboration and resource-sharing citywide.
- Encourage resource-sharing at a neighborhood scale (tools, expertise, Wi-Fi, energy, childcare, backyards, gardens, etc).
- Encourage resource-sharing citywide through the establishment of a Time Bank, Hour Exchange, or other similar initiative.
- Support active neighborhood and civic organizations, and encourage them to work both in partnership and independently to expand their focus to issues of broad civic impact and benefit.
- Support community-driven neighborhood improvement initiatives, such as the Neighborhood Innovation Grant Program.

Some residents are tearing down their backyard fences to create a more communal space for gardens and other shared uses in their neighborhood. This "pocket neighborhood", Conover Commons Cottages was designed by Ross Chapman Architects and developed by the Cottage Company.

- Encourage resident participation in and resident-driven volunteer initiatives.
- Sponsor and promote friendly neighborhood competitions (garden awards, bike-a-thons, etc).
- Support and promote neighborhood block parties and other gatherings which strengthen community pride.
- Support initiatives that bring together residents of different generations and backgrounds, particularly those that provide ways for older, retired residents to remain engaged in the life of the city.





Time Banks are a wonderful way to share resources. Through such a system, members gain hours of service for each hour of service rendered, bartering their skills in exchange for those they lack.

**Photo: Portland Hour Exchange** 

**Photo: Coalition for a Better Acre** 

11

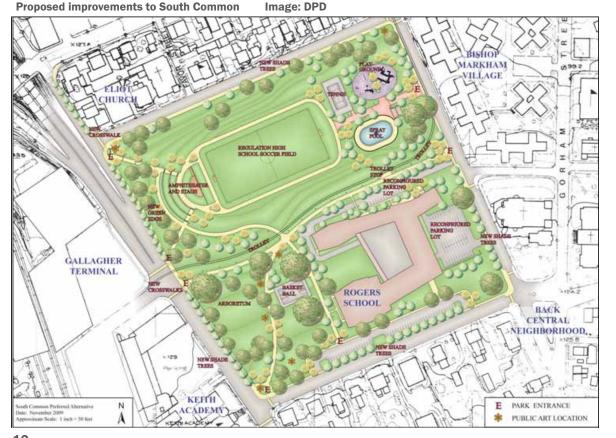


Photo: DPD



### T ENSURE THE INTEGRATION OF NATURE, GREEN SPACE AND HIGH QUALITY RECREATIONAL RESOURCES INTO THE URBAN LANDSCAPE.

- Ensure that every resident is within walking distance of a public park.
- Routinely update and implement the City's Open Space Plan.



- Identify and employ sustainable funding strategies to ensure longterm maintenance coverage for open space and recreational needs, such as engravers and advertising instead of dedications.
- of parks, playground equipment, and other recreational resources so as to best allocate available resources and meet the needs of the city's residents, drawing upon volunteers and interns who may benefit from such a learning experience.
- Ensure the protection of existing and endangered flora and fauna within the City.
- Expand the network of active and passive recreational spaces and forests throughout the City and region, and improve networks and connections between existing spaces.
- Identify parcels of land to permanently protect, prioritizing parcels that contain high value natural resource benefits.

- Increase access to recreational resources both within and beyond city limits by ensuring that transit service and parking amenities are available to residents and visitors, and that way-finding signage is enhanced.
- Explore use of under-utilized and nontraditional spaces for open space development.
- Creatively utilize recreational amenities throughout all four seasons.
- Improve the utilization and maintenance of existing pocket parks, and identify locations for future sites, particularly in areas of the City that are lacking in green space.
- Properly fund or establish appropriate responsibility for maintenance activities and programs offered at current public spaces.
- Identify funding for interactive and recreational water elements at appropriate places throughout the city to better activate and enliven these spaces.

- Diversify participation of active and passive recreational spaces by broadening outreach, expanding the mix of programs and amenities available, and encouraging use of spaces for events and activities by residents of all backgrounds.
- Support privately organized youth athletic, arts, and other programs available to the residents of Lowell's neighborhoods.
- Partner with local organizations and institutions to identify solutions for unique recreational needs.
- Consider adjacent buildings and their uses as a mechanism for activating public parks and open spaces.
- Identify funding and implement planned improvements at South Common.



Lowell's dog park Photo: Marianne Gries



**Photo: Lowell Parks & Conservation Trust** 

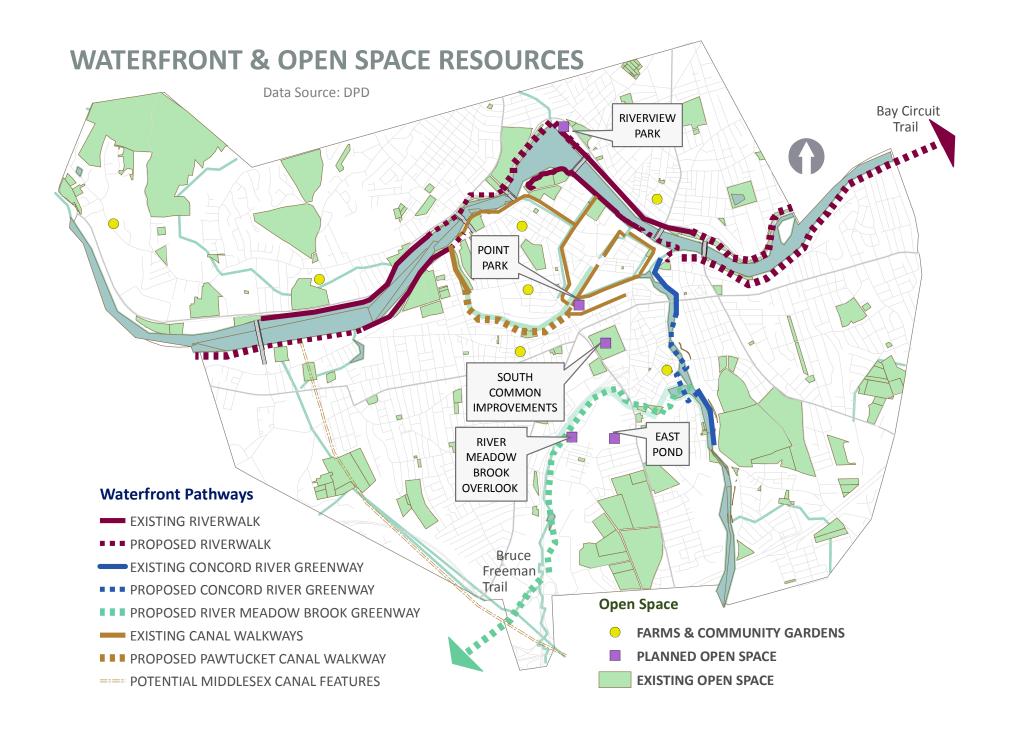
**Photo: DPD** 



#### CELEBRATE, IMPROVE, AND ACTIVATE WATERFRONT RESOURCES.

- Expand existing trail networks to connect with the regional and statewide system of trails.
- Increase access to waterways from neighboring streets.
- Enhance waterfront recreational amenities and expand programming.
- Define responsibilities for and implement an improved maintenance program for rails, walkways, lighting, benches, landscaping and general cleanliness so as to provide safe and convenient access to the waterfront.
- Identify funding and implement planned improvements at Riverview Park and the accompanying extension of the Riverwalk along the north side of the Merrimack River, between University Avenue and Aiken Street, and plan for future connections to the Concord River Greenway.
- Complete the Concord River Greenway.
- Design and construct a walkway along the Pawtucket Canal which will connect the Downtown to the Merrimack River through the Acre Neighborhood.

- Design and construct a pathway along the River Meadow Brook between Cross Point Towers and the Concord River.
- Establish a Pawtucket Falls Overlook that is integrated with the City's existing bike and pedestrian pathway system.
- Explore the feasibility of developing a pathway and series of recreational spaces along the old Middlesex Canal.
- Explore the feasibility of extending the walkway through Sheehy Park along the Merrimack River to the Rourke Bridge, and extending the Pawtucket Boulevard walkway beyond the Rourke Bridge to the boat launch managed by the Department of Conservation and Recreation.
- Coordinate waterfront development with existing and future recreational amenities and transportation resources.
- Revise the zoning of selected waterfront areas to properly balance city-wide development objectives with neighborhood preservation priorities, including the establishment of a Suburban Waterview District along portions of Pawtucket Boulevard.





# DEVELOP POLICIES AND PROGRAMS THAT FACILITATE THE PRODUCTION, DISTRIBUTION, AND CONSUMPTION OF LOCALLY GROWN FOOD IN THE GREATER LOWELL REGION.

- Support the establishment, management, and maintenance of community gardens throughout the City.
- Amend zoning as required to support agricultural production or distribution as potential uses in appropriate areas of the city.
- Encourage the establishment and maintenance of urban farms within Lowell as well as production farms in the surrounding region.
- Support the establishment of a year round farmer's market as well as the expansion of satellite farmer's markets to the city's neighborhoods.
- Encourage more Lowell-based community supported agriculture, whereby individual consumers pledge to support local growers and share the risks and benefits of local food production.
- Support the establishment of a food coop in Lowell.
- Provide incentives for businesses offering food stamps for healthy produce.
- Encourage local sourcing of ingredients and food products by restaurants, institutions, and other food establishments in the local and regional marketplace.

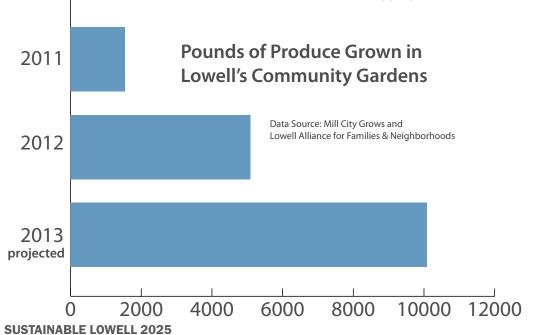


Photo: Kusine

Urban farming is part of a growing movement to live more sustainably.

Photo: Lowell Parks & Conservation Trust

- Support the establishment of a community seed and tool library, which encourages gardeners to save and exchange their seeds for future growing seasons.
- Prioritize the planting of public fruit trees, where appropriate, to encourage edible landscapes citywide.
- Partner with local organizations to promote and educate about healthy eating practices.
- Where appropriate, implement the recommendations of the Food Security Coalition's Community Food Assessment, and other initiatives that proactively address issues of food access and community health.
- Support the development of an Urban Food Production Plan in Lowell, and implement it as appropriate.





HSTORIC CHARACTER & PRESE	PUBL QUALITY & VIEW	CMIC TO HEALTH & ST.	EMGAGEMENT SOCIAL E	RECREAS. COMMUNITY COUNTY	MULTIMOUS OPPORTS	OF SOURCE & IN THANSPORTS	COLLABORATION STATION	EDU PARTMERS	LOCAL ECO LICATION & TRANS	CONOMIC DEVELO	TRAMSPARENCY JOB CREAT	INFRASTRIC OUNTAGE	WINDOMMENTAL.	MATURAL RESOURCE BLANNING & PO	CARBON C. CONSERVE	EMISSION REDUC	EFFECTIVE & E.T. COST REDUC	ARTS & CO.	SHOPPING MIESTIN	IG & EMTERTALMENT	
SUSTAINABLE NEIGHBORHOODS		_		_			Æ				<b>?</b>		7	W		<b>P</b>	<b>3</b>	3	00	0	•
PRESERVE THE UNIQUE QUALITY AND CHARACTER OF EACH OF LOWELL'S NEIGHBORHOODS.																					
PROMOTE SAFE AND WELCOMING NEIGHBORHOODS.																					
PRIORITIZE LAND-USE POLICIES THAT PROMOTE WALKABLE, WELL-NETWORKED NEIGHBORHOODS.																					
SUPPORT VIBRANT NEIGHBORHOOD BUSINESS DISTRICTS THAT ARE EASILY ACCESSIBLE TO ALL RESIDENTS.										•		•									
CULTIVATE SCHOOLS AS MODELS FOR COMMUNITY COHESION AND SELF-SUFFICIENCY.																					
FOSTER NEIGHBORHOOD-LEVEL CAMARADERIE, ADVOCACY, AND RESOURCE SHARING.																					
ENSURE THE INTEGRATION OF NATURE, GREEN SPACE AND HIGH QUALITY RECREATIONAL RESOURCES INTO THE URBAN LANDSCAPE.																					
CELEBRATE, IMPROVE, AND ACTIVATE WATERFRONT RESOURCES.																					
DEVELOP POLICIES AND PROGRAMS THAT FACILITATE THE PRODUCTION, DISTRIBUTION, AND CONSUMPTION OF LOCALLY GROWN FOOD IN THE GREATER LOWELL REGION.																					



owell will seek to provide a range of safe, fair, highquality, and affordable housing opportunities for residents of all backgrounds in an effort to achieve the level of diversity that will germinate both prosperity and innovation. The city will ensure that residential needs are linked to lifestyle amenities and that sustainable design approaches are employed wherever possible.

## **HOUSING CHOICE**



**Photo: Meghan Moore** 

# OPCIONES EN LA VIVIENDA

*ខំរើសឆ្លុះសម្បែច* 

Lowell buscará proveer una variedad de oportunidades de vivienda seguras, justas, costeables y de alta calidad para todos y todas los residentes en un esfuerzo de lograr un nivel de diversidad que germine la prosperidad y la innovación. La ciudad asegurará que las necesidades residenciales se vinculen a comodidades diarias y que se usen diseños sostenibles donde sea posible.

ឡូវ៉ែល្ល នឹងស្វះស្វែងផ្ដល់ឱ្យកាលដែលមានសុវត្ថិភាព, ល្អគ្រប់គ្រាន់, ជុណភាពខ្ពស់, និងគេហដ្ឋានដែលសមល្មមនឹងជួលបាន សំរាប់ អ្នករស់នៅជាអចិន្ត្រៃយ៍គ្រប់មជ្ឍដានទាំងអស់ ក្នុងការខិតខំប្រឹង ប្រែងសំជចគោលដៅមានភាពចំរុះមុខគ្រប់កម្រិត ដែលនឹងកកើត ទាំងវិបុលភាព និងនវានុវត្តន៍។ សាលាក្រុងនឹងធានាថា សេចក្ដីត្រូវ ការនៃគេហដ្ឋាន គឺត្រូវតភ្ជាប់ជាមួយនឹងរបៀបរស់នៅគួរជាទីគាប់ ចិត្តហើយបង្កើតជាមធ្យោបាលអាចទ្រទ្រង់មុខការនៅពេលណាដែល អាចធ្វើទៅបាន។

## ESCOLHA DE HABITAÇÃO

Lowell procurará fornecer uma variedade de habitação segura, acessível, e de grande qualidade para residentes de varias circunstâncias familiares e etapas de vida, num esforço para alcançar o nível de diversidade para promover prosperidade e inovação. A cidade irá garantir que necessidades de habitação estão ligadas a comodidades de estilos de vida e que as abordagens á architectura sustentável são empregadas sempre que possível.

#### **OBJECTIVES**

1	Maintain high-quality, healthy homes throughout the city for rent and purchase
2	Build and maintain a diversity of housing options throughout the city so as to support economic vitality and meet the evolving needs of residents.
3	Encourage responsible home ownership to support neighborhood stability.
4	Maintain an abundance of affordable housing for rent or purchase, and strive to maintain the relative affordability of housing in Lowell compared to other communities in the region.
5	Prioritize sustainable housing development policies and practices.
6	Ensure that adequate infrastructure exists for new residential development.
7	Encourage institutional growth that ensures a high quality of life in Lowell's neighborhoods.
8	Ensure that all residents have a safe and secure place to call home.
9	Ensure that all residents have equal access to fair housing.
10	Balance open space needs with development citywide.



The Receivership Program provides assistance in stabilizing troubled properties. Abandoned properties are able to be placed back on the market, and tenants avoid displacement when their properties are brought up to code. The City of Lowell hosted a ribbon-cutting ceremony to celebrate the unveiling of its first property rehabilitated through receivership, enabling Lowell to collect \$20,000 in unpaid property taxes owed by the prior owner. Photo: DPD

#### MAINTAIN HIGH-QUALITY, HEALTHY HOMES THROUGHOUT THE CITY FOR RENT AND PURCHASE.

- Identify and publicly acknowledge the efforts of property owners that set a positive example for others.
- Continue to implement code enforcement based on the broken windows philosophy, and other proactive approaches.
- Improve compliance with building and health codes through increased public education and collaboration with neighborhood groups that can assist in identifying priority improvement areas.
- Improve coordination with other city departments and agencies, and continue to implement routine neighborhood inspections with interdepartmental inspection teams.

- Increase the number of overall inspections within the city, inspecting all multi-unit properties every 3 years for minimum maintenance and other potential violations, and improving datatracking of those inspected.
- Maintain fire safe buildings in compliance with city, state and federal laws.
- Provide land-use board training and professional staff support to prevent projects with code violations or safety hazards from being constructed.
- Address vacant/abandoned property issues through implementation of the Receivership Program, among other approaches.

- Explore the establishment of a community design resource center to provide consulting services and educational workshops to residents and developers, or a partnership with an established organization that provides similar programming in area communities (ie: Boston Building Materials Coop).
- Seek funding to provide historic preservation loans and other benefits for the preservation and restoration of historic dwellings located within Lowell's Historic Districts.
- Seek resources to support lead safe housing and healthy homes, including educational and preventative opportunities as well as the abatement of documented hazards.

- Explore the establishment of a revolving loan fund for emergency sewer repairs.
- Encourage property owners to invest in upgrades to their homes, prioritizing energy efficiency improvements and upgrades that address building code violations.
- Continue to implement and seek resources to support remaining housing development as identified in the Acre Urban Revitalization and Development Plan area.



Photo: CBA



**Photo: Meghan Moore** 



**Photo: DPD** 

# 2 BUILD AND MAINTAIN A DIVERSITY OF HOUSING OPTIONS THROUGHOUT THE CITY SO AS TO SUPPORT ECONOMIC VITALITY AND MEET THE EVOLVING NEEDS OF RESIDENTS.



**Photo: Trinity Financial** 

Co-housing provides shared common facilities and a sense of community amongst neighbors. Above is Hearthstone Cohousing Community.

Photo: Altopower

- Facilitate additional market rate housing production within the housing development zone in Downtown Lowell that has been designated under the State's Housing Development Incentive Program, and explore the establishment of such zones in other parts of the city where this tool can help catalyze the development of quality market-rate housing.
- Where appropriate, support models that combine ground floor retail space with housing above so as to encourage economic activity.
- Continue to promote live/work housing models to encourage artists and other members of the creative class to remain in or relocate in Lowell and support a culture of vibrancy.
- Explore co-housing developments that encourage resource-sharing and a greater sense of community cohesion amongst residents.

- Explore the development potential for market-rate multi-unit buildings containing mini-units that are designed to draw upon larger common areas and kitchen spaces to accommodate individual needs.
- Encourage the development of market rate housing for 55+ aged residents, and strive to locate it in close proximity to health care facilities and other services.
- Provide incentives for market rate housing in areas where disproportionate amounts of subsidized housing reinforce concentrations of poverty.
- Encourage the conversion of vacant schools, fire houses, religious buildings, and other large historic structures located in residential areas into multi-family residential properties, where appropriate, and preserve these as neighborhood landmarks.
- Increase the percentage of multi-family housing available that will encourage families to move to and remain within Lowell, thereby creating a sense of stability.

#### **3** ENCOURAGE RESPONSIBLE HOME OWNERSHIP TO SUPPORT NEIGHBORHOOD STABILITY.

- Support organizations that provide first-time home-buyer courses and postownership workshops.
- Provide down payment assistance and other incentives for first-time homebuyers to purchase homes in Lowell's neighborhoods and remain in them for at least five years.
- Strengthen property owner associations.
- Promote owner-occupancy, particularly in neighborhoods with traditionally high concentrations of absentee landlords.
- Continue to support Two-for-Lowell and other incentive programs that promote owner-occupancy in two- and three-family buildings.



Through their training programs, the Merrimack Valley Housing Partnership has assisted nearly 13,000 families as of 2012. Photo: Merrimack Valley Housing Partnership



**Photo: CBA** 

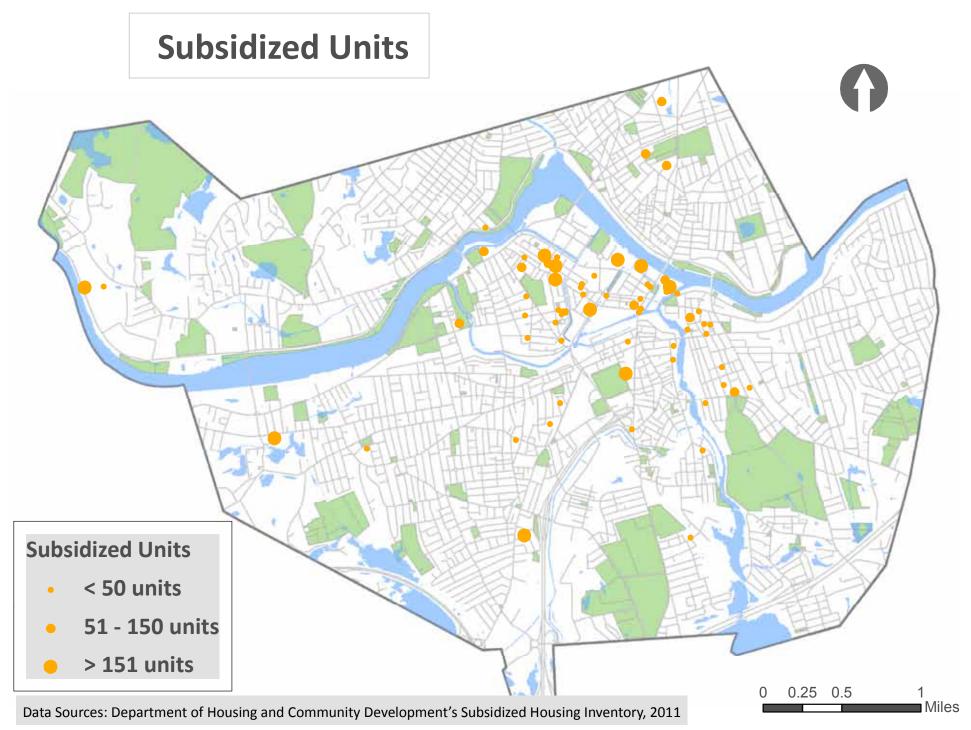
- MAINTAIN AN ABUNDANCE OF AFFORDABLE HOUSING FOR RENT OR PURCHASE AND STRIVE TO MAINTAIN THE RELATIVE AFFORDABILITY OF HOUSING IN LOWELL COMPARED TO OTHER COMMUNITIES IN THE REGION.
- Maintain a distribution of affordable housing throughout the neighborhoods.
- Maintain 10% or more of the city's housing stock as affordable, in compliance with the requirements of Massachusetts General Law Chapter 40B.
- Efficiently utilize diminishing HOME (Housing Opportunity Made Equal) federal block grant program funds in ways that reflect and reinforce the City's established housing priorities.

- Seek opportunities to replace HOME funds sustainably, as Congressional action continues to threaten the longterm stability of this funding source.
- Decrease crime so as to reduce high auto insurance rates that may be a deterrent to living in Lowell.
- Support the establishment and vitality of resident-driven community housing development corporations, as defined by the HOME program to produce distributed affordable housing in Lowell's neighborhoods.
- Focus government housing subsidies, when appropriate, toward projects that meet other established city objectives, including economic development, historic preservation, urban renewal, downtown and neighborhood revitalization, and the reduction of concentrations of poverty, in addition to producing affordable housing units.
- Promote energy efficiency and weatherization as a means of reducing overall housing costs.



Photo: DPD





#### PRIORITIZE SUSTAINABLE HOUSING DEVELOPMENT POLICIES AND PRACTICES.

Support the development of housing that links work, transportation, and recreational opportunities.



- Explore deconstruction instead of demolition so as to re-use building materials whenever possible.
- Continue to support programs that reinforce the concept that historic preservation and sustainable development can be mutually reinforcing rather than conflicting objectives.
- Encourage developers and property owners to draw upon local talent and expertise in all residential construction efforts.
- Encourage new residential developments that provide for communal spaces and shared resources.
- Educate developers and residents about the economic and environmental benefits of sustainable building practices, using visual models when possible.

VIA VERDE in the Bronx is affordable, sustainable, and livable. Grimshaw/Dattner, Architects; Phipps Houses/Jonathan Rose Companies, Developers

Photo: Via-Verde-Dattner-Grimshaw SUSTAINABLE LOWELL 2025

- Partner with local companies to encourage implementation of solar arrays and other sustainable design practices.
- Expand on and market existing programs to provide incentives for energy efficiency improvements that address the unique needs of Lowell's housing stock.
- Continue to provide consistent enforcement and compliance with the MA Stretch Energy Code, a building code established in 2008 requiring greater energy efficiency in buildings than the standard energy code.
- Incentivize passive building design approaches, whereby windows, walls and floors are oriented so as to collect, store and distribute solar energy without the use of mechanical or electrical devices, thereby conserving energy.

- Manage stormwater by incentivizing sustainable design approaches such as xeriscaping (landscaping in ways that reduce or eliminate the need for supplemental water from irrigation), rain barrel usage, edible landscaping, and permeable paving.
- Require all City-assisted housing developments to achieve significant energy efficiency, including attainment of Energy Star and/or LEED (Leadership in Energy and Environmental Design) certification where possible.



Photovoltaics, which convert solar radiation into directcurrent electricity, and hot water panels on a home in Lowell Photo: DPD

An "Edible Estate" reduces water consumption by replacing grass with edible fruits and vegetables.

Photo: DPD

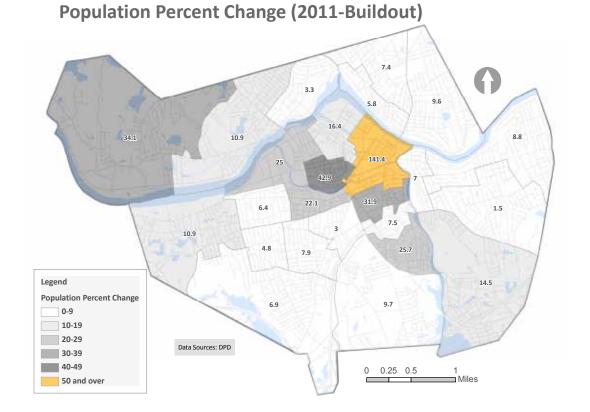


#### **ENSURE THAT ADEQUATE INFRASTRUCTURE EXISTS FOR NEW** RESIDENTIAL DEVELOPMENT.

Coordinate utility, recreational, transportation, and infrastructure upgrades with areas of anticipated housing development.

#### Collaborate with the University and other public and private entities to develop strategies for developing and maintaining student housing.

- Continue to seek funding for the on- and off-site infrastructure associated with the Hamilton Canal District Master Plan and Massachusetts Environmental Policy Act (MEPA) decision.
- Use the Site Plan Review process to seek private developer assistance in road maintenance or infrastructure improvements so as to mitigate the impacts of proposed developments.





**Image: Icon Architecture SUSTAINABLE LOWELL 2025** 

#### **T**ENCOURAGE INSTITUTIONAL GROWTH THAT ENSURES A HIGH QUALITY OF LIFE IN LOWELL'S NEIGHBORHOODS.

- Explore rezoning of areas around the city's major institutions to accommodate the evolving needs of those neighborhoods, including providing housing that is appealing to recent graduates, faculty, and others affiliated with these institutions that have a long-term, vested interest in the city.
- Encourage UMass Lowell and Middlesex Community College to support efforts by private developers to expand housing on or near the campuses that may be attractive to recent graduates, so as to help retain young talent during their transition between school and the working world.
- Support the development of denser, higher residential development with retail uses at street level as a means of concentrating student retail and employment opportunities, and encouraging construction of off-campus housing with sufficient parking, thereby reducing the impact on the neighborhood housing market.

- Identify areas with convenient access to the University and Middlesex Community College that would be suitable for the development of new student housing, including off-campus dormitories, which will generate tax revenue for the City and offset costs of providing public safety and infrastructure services to students.
- Through the reinvigoration of the Homebuyer Incentive Program and other similar means, incentivize the purchase of homes in Lowell by students, faculty and staff of UMass Lowell, Middlesex Community College, and employees of other major institutions in the community.



University Crossing Student Center, opening 2014 Image: UMass Lowell

University Suites Residence Hall, opening fall 2013 Image: UMass Lowell





#### ENSURE THAT ALL RESIDENTS HAVE A SAFE AND SECURE PLACE TO CALL HOME.





**Photo: House of Hope** 



32

- Prioritize funds used to address homelessness towards programs and initiatives aimed at prevention and rehousing.
- Support and promote programs that rapidly re-house individuals or families who are currently homeless.
- Prioritize support for programs serving homeless and/or at-risk homeless veterans as well as those programs working to end chronic homelessness.

- Implement the city's Partnership for Change: Action Plan to End Homelessness.
- Work to align city priorities and policies with federal strategies around homelessness prevention.
- Maintain and strengthen the city's partnerships with non-profit providers serving homeless and at-risk homeless clients.

#### 9 ENSURE THAT ALL RESIDENTS HAVE EQUAL ACCESS TO FAIR HOUSING.

- Address the impediments and recommendations identified in the US Department of Housing and Urban Development (HUD) required Analysis of Impediments to Fair Housing Choice.
- Educate residents, property owners, landlords and other housing providers on the avenues available for reporting acts of housing discrimination.
- Incorporate fair housing into the City's rental housing inspection and certification process.
- Provide translated trainings and translated documentation on housing policies and programs for enhanced accessibility.
- Support the establishment of a Fair Housing Center in Lowell.

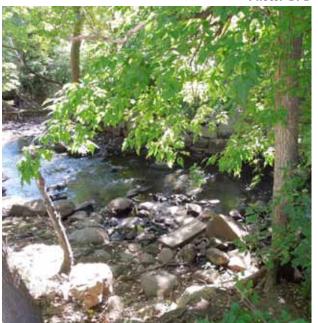


Founded in 1998 and funded by HUD, the mission of the Fair Housing Center of Greater Boston is to eliminate housing discrimination throughout the region. The center provides a variety of housing services, including case advocacy, training, and community outreach.

Photo: MIT Lower Highland Neighborhood Plan

Once developed, the proposed Pawtucket Canal Walkway (above) and River Meadow Brook Greenway (below) will serve as valuable and unique open spaces in the densely-populated areas of the city in which they are located.

Photo: DPD



#### **10** BALANCE OPEN SPACE NEEDS WITH DEVELOPMENT CITYWIDE.

- Continue efforts to acquire properties which can support the City's open space goals through tax title foreclosure, conservation restrictions, and municipal acquisition as applicable.
- Preserve existing open spaces in sensitive environmental areas and those which support the City's recreational objectives.
- Require developers to incorporate landscaping into new projects, and maintain public open spaces on their existing properties.
- Continue to collect and analyze land-use and census data for Lowell and peer communities to best assess what types of open space and development needs exist and determine how best to allocate resources.

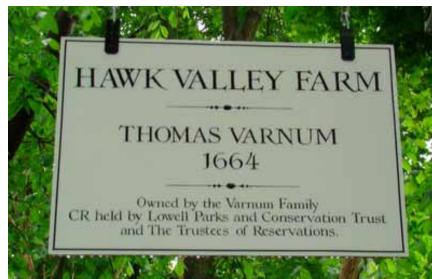


Photo: Lowell Parks & Conservation Trust

HISTORIC CHARACTER & PRESEN	PURE QUALITY & VE	CNIC LEATH & SE	ENGAGEMENT C SOCIAL C	RECREATION TO THE FOURTY	MULTIMOV, OPPORT	RESOURCE & IN TRANSPORTE	COLLABORATION SHATION	EDU LARIME PARTMERSO	LOCAL EU-	COMOMIC DEVELLATION	TRAMSPARENCY JOB CREAT	INFRASTRO LATION	WIROMMENTAL.	NATURAL RESOURCE	CARBON L. CONSERVIC	EMESION REDUC	EFFECTIVE & L. T. TREVIO	ARTS & CO.	SHOPPING ATIONS	ALG & EMTERTALISM	
HOUSING CHOICE		6	$\odot$		(MA)		Æ	Ø₹0				\$	3	W		7	9	8	್ಯಂ	0	
MAINTAIN HIGH-QUALITY, HEALTHY HOMES THROUGHOUT THE CITY FOR RENT AND PURCHASE.																					
BUILD AND MAINTAIN A DIVERSITY OF HOUSING OPTIONS THROUGHOUT THE CITY SO AS TO SUPPORT ECONOMIC VITALITY AND MEET THE EVOLVING NEEDS OF RESIDENTS.																					
ENCOURAGE RESPONSIBLE HOME OWNERSHIP TO SUPPORT NEIGHBORHOOD STABILITY.																					
MAINTAIN AN ABUNDANCE OF AFFORDABLE HOUSING FOR RENT OR PURCHASE, AND STRIVE TO MAINTAIN THE RELATIVE AFFORDABILITY OF HOUSING IN LOWELL COMPARED TO OTHER COMMUNITIES IN THE REGION.																					
PRIORITIZE SUSTAINABLE HOUSING DEVELOPMENT POLICIES AND PRACTICES.																					
ENSURE THAT ADEQUATE INFRASTRUCTURE EXISTS FOR NEW RESIDENTIAL DEVELOPMENT.																					
ENCOURAGE INSTITUTIONAL GROWTH THAT ENSURES A HIGH QUALITY OF LIFE IN LOWELL'S NEIGHBORHOODS.																					
ENSURE THAT ALL RESIDENTS HAVE A SAFE AND SECURE PLACE TO CALL HOME.																					
ENSURE THAT ALL RESIDENTS HAVE EQUAL ACCESS TO FAIR HOUSING.																					
BALANCE OPEN SPACE NEEDS WITH DEVELOPMENT CITYWIDE.																					

# **MOBILITY AND ACCESS**



istoric and densely populated cities must strive to employ multi-modal transportation strategies in order to achieve mobility, vitality, and environmental health, as their pre-automotive designs are unable to accommodate significant traffic flow increases. As a result, Lowell will embrace a multi-modal strategy, which prioritizes amenities for pedestrians, bicyclists, public transitusers, and carpooling commuters. This model will also help ensure long-term economic sustainability, as transportation choice is desirable to the diverse population already living within the city, as well as the next generation seeking to relocate to a vibrant urban place.

**Photo: Meghan Moore** 

#### MOVILIDAD Y ACCESO

Ciudades históricas y densamente pobladas deben buscar usar estrategias de transporte de múltiples modos para lograr la movilidad, la vitalidad, y la salud ambiental, ya que sus diseños pre-automovilísticos no pueden acomodar grandes aumentos en el flujo del tráfico. Por ende, Lowell adoptará una estrategia multi-modal, la cual priorizará comodidades para peatones, bicicletistas, usuarios(as) del transporte público, y personas que viajan a diario al trabajo compartiendo carros con otras. Este modelo también ayudará a asegurar la sostenibilidad de largo plazo ya que el poder elegir el modo de transporte es deseable para la población diversa que ya radica en la ciudad, así como para la siguiente generación que quiera mudarse a un lugar urbano y vivo.

# ចល់គីគាព និ១ខ្និកាសច្រើប្រាស់បាន

ទីក្រុងដែលមានក្នុងប្រវត្តិសាស្ត្រ ហើយមានប្រជាពលរដ្ឋច្រើន ត្រូវ
តែខិតខំពស៊ូប្រើយុទ្ធសាស្ត្រដឹកជញ្ជូនច្រើនបែប ដើម្បីសំរេចគោលដៅ
ចល់ពីភាព, ភាពស្វាហាប់, និងបរិស្ថានមានសុខភាពល្អ, ពេលដែល
គួរប្លង់មុនមានរថយន្ត មិនអាចសម្របសម្រួលចរាចរណ៍ដែលមាន
កំណើនខ្លាំងនោះបានទេ។ ដូច្នោះ ឡូវ៉ែល្អ នឹងកាន់យកយុទ្ធសាស្ត្រ
ច្រើនបែប, ដែលផ្តល់អាទិភាពជាទីគាប់ចិត្តសំរាប់អ្នកដំណើរ, អ្នកជិះ
កង់, អ្នកប្រើផ្លូវធ្លងកាត់សាធារណៈ, និងអ្នកធ្វើដំណើរទៅមកពីផ្ទះទៅ
កន្លែងធ្វើការដោយជិះឡានជាមួយគ្នា។ ម៉ូតជាគំរូនេះក៏នឹងជួយធានាថា
អាចរក្សាឲ្យមានការទ្រទ្រង់សេដ្ឋកិច្ចក្នុងរយៈពេលយូរផងដែរ, ពេល
ដែលជំពីសដឹកជញ្ជូន គឺជាសេចក្តីប្រាថ្នាចំពោះប្រជាពលរដ្ឋទូទៅ ដែល
កំពុងរស់នៅទីក្រុងឡូវ៉ែល្អរួចមកហើយ, ក៏ដូចមនុស្សជំនាន់ក្រោយ
កំពុងតែស្វែងរកការផ្លាស់ប្តូរទៅរស់នៅទីក្រុងដែលមានភាពរស់រជិក។

## MOBILIDADE E ACESSO

Cidades históricas e densamente povoadas deverão empregar estratégias de transporte multimodal, a fim de alcançar mobilidade, vitalidade e saúde ambiental, já que a suas vias contruídas antes do automóvel ser introduzido, são incapazes de acomodar o aumento do fluxo significativo de tráfego veicular. Como resultado, Lowell vai adoptar uma estratégia multimodal, que prioriza as faixas para pedestres, ciclistas, usuários de transporte públicos e usuários de "carpooling". Este modelo também irá ajudar a garantir a sustentabilidade económica a longo prazo, proporcionado várias opções de transporte desejáveis á população diversa que reside na cidade, bem como á próxima geração procurando habitar num centro urbano vibrante.

#### **OBJECTIVES**

1	Promote bike and pedestrian mobility.
2	Increase use and efficiency of public transportation.
3	Improve access to and support a variety of options for sustainable commuting practices.
4	Support land-use transportation policies that encourage multi-modal mobility
5	Where practical, improve traffic flow and the capacity of the City's existing streets.
6	Minimize the transportation demand generated by new development and institutional growth.
7	Maximize public safety in all modes of transportation.
8	Ensure efficient freight transportation.
9	Maximize the utility of available parking resources in retail and residential areas.
<b>10</b>	Promote quality urban design in all transportation infrastructure projects.
11	Beautify and enhance gateways and entry points.



#### PROMOTE BIKE AND PEDESTRIAN MOBILITY.

- Develop, implement and identify funding to maintain a citywide Bicycle Plan that continues to build upon the existing network of bike lanes, sharrows (shared use lanes), storage racks, and signage, in addition to self-service stations, guides and maps to display bike-friendly routes, and other relevant amenities for cyclists.
- Explore the establishment of a Bicycle and Pedestrian committee.
- Support the establishment of a citywide or regional Bike Share Program.



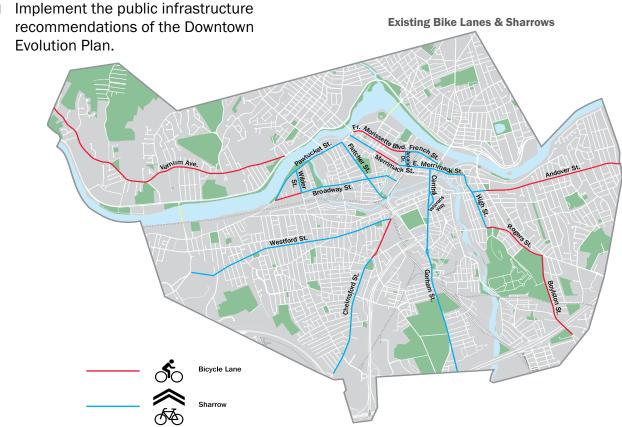
Bike Stations
provide storage
lockers, bike
accessories
and showers
for commuters
in many urban
centers. Some
are independent
structures
and others are
contained in
vacant storefronts.
Photo:
Son of a Bike

- Develop a bike safety education campaign for both bicyclists and drivers, continuing to organize outreach events and make resources available so as to create a culture of biking citywide.
- Support UMass Lowell's campus bike share program, installation of bike racks on their shuttle buses, and other related initiatives.
- Support businesses that cater to cyclists.
- Continue to improve and expand Lowell's system of canal and river walkways, as well as regional trail networks, for both leisure and transportation purposes, constructing pathways that adequately serve as shared-use paths for pedestrians and bicyclists.
- Expand the Safe Routes to School program and ensure that school zones are brought into compliance with the Manual on Uniform Traffic Control Devices (MUTCD).
- Ensure timely removal of ice and snow, and pruning of encroaching vegetation on sidewalks.



- Develop and implement an operational and maintenance plan for pedestrian and bicycle facilities and infrastructure, including but not limited to sidewalks, potholes, rails and lighting.
- Conduct street-sweeping at least twice per year on all public streets and more frequently in heavily travelled pedestrian and bicycle areas including Downtown, neighborhood business districts, at major fixed transportation stops, and near the university campuses.
- Ensure that mid-block crossings and primary intersections are in compliance with the American Disabilities Act (ADA) and include functioning pedestrian signal buttons.
- Implement a firm policy in favor of concurrent pedestrian phasing and pedestrian right-of-way at signalized intersections, eliminating exclusive pedestrian phasing wherever feasible.
- Identify areas in need of traffic calming interventions and, wherever possible, prioritize improvements in these locations.

Implement traffic-calming strategies and streetscape enhancements identified in the 2009 City Building Workshops by residents living in neighborhoods adjacent to Downtown.



SUSTAINABLE LOWELL 2025 Data Source: DPD 43

# Wi-Fi Pamaty State

Wi-Fi has dramatically increased ridership on public transit. Photo: DPD



Lowell plans to expand its streetcar system into a public transit service. Photo: Cultural Organization of Lowell



Lowell has installed a dozen bus shelters throughout the city.

Photo: DPD

#### INCREASE USE AND EFFICIENCY OF PUBLIC TRANSPORTATION.

In partnership with the Lowell National Historical Park, UMass Lowell, and other partners, support the expansion of the Lowell Streetcar system from a National Park visitor amenity to a viable public transit service with connections to the Gallagher Terminal, Hamilton Canal District, and UMass campuses to the extent that it proves financially viable, does not compromise funding and support for other transportation priorities, and enjoys the active support of its primary beneficiaries.



Luggage, packages, strollers, and shopping carts should be accommodated. Photo: DPD

- Prioritize multi-modal and vehicular improvements to the Gallagher Terminal from nearby neighborhoods and the Downtown.
- Utilize interactive technologies, publicize scheduling information, and provide free Wi-Fi on public transit.
- Ensure the accommodation of strollers, luggage, shopping carts, and bikes on public buses and trains.
- Improve LRTA service by extending the hours of operation, making maps and schedules readily available, increasing the number of bus shelters, and exploring greater frequency of service through expanding the usage of smaller buses.

- Develop a flex bus/van system, and explore a partnership with MassRIDES to meet the changing demands of passengers.
- Partner with the LRTA and other entities to identify and develop public art and educational initiatives that enhance the quality of the rider experience.
- Identify and reserve a potential fixed route transit corridor between the Gallagher Terminal and Cross Point Towers.
- Encourage UMass Lowell and Middlesex Community College to enter into rideshare agreements with the LRTA so as to increase institutional ridership and reduce unnecessary duplication of service.

- Advocate for the maintenance of existing MBTA services, rates, and schedules that benefit Lowell residents and employers.
- Support the expansion of the MBTA commuter rail north to New Hampshire and improve transit connections from North Station to South Station and other locations in Boston so as to enhance the utility of commuter rail service for Lowellbased riders with destinations outside the City.
- Promote mass transit options along the Route 3 and I-495 corridors to better reflect and support the economic integration of the region.



Flex routes and schedules offer enormous potential to make public transit more accessible and convenient.

Photo: Rhode Island Public Transit Authority



Photo: DPD



**Photo: Mandy Moore** 



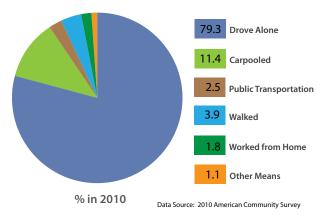
Photo: DPD



#### 3 IMPROVE ACCESS TO AND SUPPORT A VARIETY OF OPTIONS FOR SUSTAINABLE COMMUTING PRACTICES.

- Encourage employers to create policies and regulations that provide incentives for car-pooling, car-sharing, and ride-sharing.
- Encourage employers, institutions, and commercial property owners to provide facilities that support bicycle commuting, including showers and secure storage areas.
- Support the extension and connectivity of regional trail networks and on-street bicycle infrastructure to encourage bike commuting.

HOW LOWELLIANS GET TO WORK



- Encourage local employers to offer flexible work schedules and the ability to work from home/telecommute.
- Encourage vehicle sharing providers to expand their Lowell service presence beyond the UMass campuses.
- Explore the potential for the establishment of local and regional Park & Rides, and explore partnerships with UMass Lowell to expand on existing Park & Ride lots geared towards students.
- Ensure that sufficient infrastructure exists to support a network of electric vehicles, including the establishment of electric vehicle charging stations, and homebased charging stations.
- Support the establishment of a Guaranteed Ride Home program, which provides a free ride during emergency situations to all residents that regularly carpool, bike, walk, or take public transit.

Photo: DPD

#### 4 SUPPORT LAND-USE TRANSPORTATION POLICIES THAT ENCOURAGE MULTI-MODAL MOBILITY.

- Utilize public transportation nodes as catalysts for higher density, transitoriented development.
- Replace minimum parking requirements with more progressive parking regulations that reduce the need for new parking construction in mixed-use districts where alternative transportation options are readily available.
- Through project review and land-use regulations, encourage site designs that support walkable neighborhoods and districts and pedestrian/bicycle accessibility to the developments themselves.
- Using the Edward Early Parking
  Structure's Middlesex Street façade
  as a model, ensure that new parking
  structures include ground floor uses and
  architectural details that stimulate an
  active streetscape and support attractive
  pedestrian experiences on adjacent
  sidewalks.
- Model employee transportation incentive programs through the City of Lowell.



**Edward Early garage street facade** 

**Photo: DPD** 



Photo: Meghan Moore

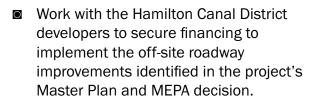


Cars, bicycles, and pedestrians sharing the street in Barcelona, Spain. Photo: DPD

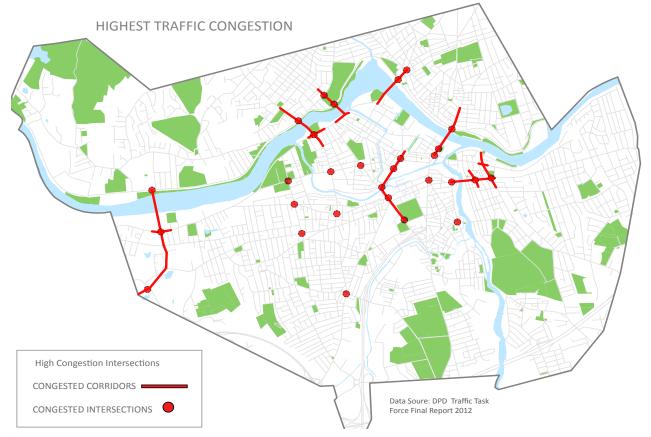


## WHERE PRACTICAL, IMPROVE TRAFFIC FLOW AND THE CAPACITY OF THE CITY'S EXISTING STREETS.

Prioritize infrastructure improvements by areas of institutional growth, and along streets that currently exceed their carrying capacity.



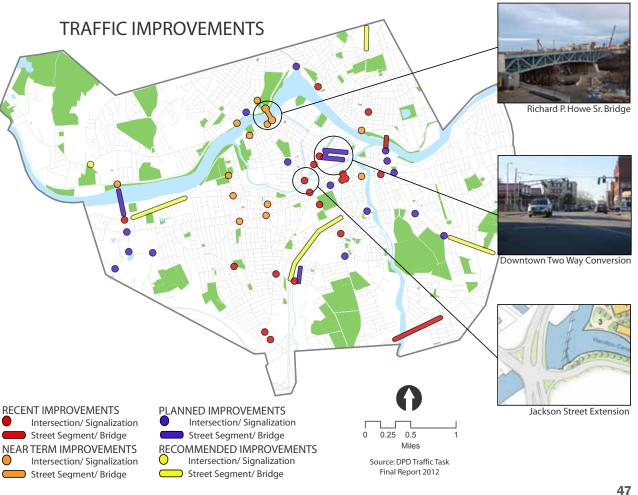
Upgrade bottleneck intersections with improved geometry, updated signals, and pavement and landscape markings. Priority intersections include: Westford/ Chelmsford, Broadway/Fletcher, Appleton/ South, Lawrence/Church, Lawrence/ Rogers, Thorndike/Dutton, Middlesex/ Wood, Prescott/Market/Central, Central/ Merrimack, Merrimack/Bridge, Father Morrissette/Cabot, Appleton/Gorham/ Central, University Ave/Riverside, Gorham/Moore, Broadway/Wilder, Chelmsford/Lincoln, Westford/School, School/Pawtucket, Thorndike/YMCA Drive/Lowell Connector Outbound, and bridge crossings.



The Rourke Bridge was constructed nearly 30 years ago as a temporary bridge over the Merrimack River. With funding from the Massachusetts Department of Transportation (Mass DOT), the Northern Middlesex Council of Governments (NMCOG) is conducting a study to identify opportunities for future improvements to the bridge and **Photo: Ashley Cantrell** surrounding area.



- Improve the level of service on primary roadways without negatively impacting pedestrian and bicycle safety and mobility.
- Implement recommendations from the Downtown Evolution Plan to make many downtown streets two-way.
- Accelerate the process for accepting unaccepted streets to increase available funding through MA Chapter 90 for maintenance.
- Increase annual appropriations for pavement markings citywide.
- Replace the temporary Rourke Bridge and make repairs to other older bridges, as deemed necessary.





**Photo: UMass Lowell** 



### 6 MINIMIZE THE TRANSPORTATION DEMAND GENERATED BY NEW DEVELOPMENT AND INSTITUTIONAL GROWTH.

- Require traffic impact study and transportation demand management plans be submitted as part of Site Plan Review for larger projects.
- The City should lead by example in transportation demand management planning, and support UMass Lowell, the School Department, and other public and private entities to adopt similar programs.
- Work with Lowell General Hospital to ensure that transportation demand management is considered in their planning for the consolidation of Lowell's two hospitals under common ownership.

- Specifically target areas of anticipated student residential growth, such as the Upper Merrimack Corridor, East Campus, and Downtown for pedestrian improvements and transportation demand management strategies.
- Work with Middlesex Community College to develop and implement transportation demand management strategies which will result in fewer single-occupancy vehicle trips to their Lowell campus and reduced parking demand.

**Photo: UMass Lowell** 

### MAXIMIZE PUBLIC SAFETY IN ALL MODES OF TRANSPORTATION.

- Incorporate Pedestrian Impact Analyses into the design process of transportation projects to protect the comfort and safety of pedestrian travel.
- Increase traffic enforcement, particularly in regards to speed limits, parking within 20' of corners, stop signs, and traffic lights.
- Focus attention on high accident areas, particularly near bridge crossings, the VFW Highway, and along the Lowell Connector.
- Ensure safe and convenient routes to business districts, schools and other daily amenities.



Photo: Scott Ableman
SUSTAINABLE LOWELL 2025



Photo: Clover\_1



**Photo: DPD** 

The Port of Charleston sponsored a Truck Replacement Program where trucking companies were assisted with down payments to purchase more environmentally-friendly and energy-efficient trucks.

**Photo: Cascade Sierra Solutions** 

### **ENSURE EFFICIENT FREIGHT TRANSPORTATION.**

- Protect capacity of loading zones through identification of appropriate downtown locations and increased enforcement efforts.
- Guarantee that arterials and bridges have sufficient weight capacity and turning radii for freight transport.
- Provide incentives for freight transportation companies that employ strategies to reduce air pollution, and strengthen enforcement of anti-idling regulations for trains, delivery trucks, buses, and other heavy vehicles.
- Encourage the use of rail for industrial freight where feasible, and identify opportunities to enhance rail infrastructure to that end.



Research has shown that left turns and U-Turns can be both dangerous and time-consuming for delivery companies. UPS saved millions by rerouting their trucks so they could avoid left turns on their routes.

**Photo: Rudolf Stricker** 

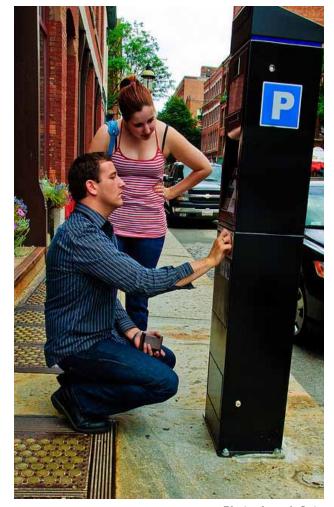


**Photo: DPD** 

### 9 MAXIMIZE THE UTILITY OF AVAILABLE PARKING RESOURCES IN RETAIL AND RESIDENTIAL AREAS.

- Encourage downtown employees and residents to utilize public parking garages, leaving on-street parking available for customers and downtown visitors.
- Improve the appearance of downtown garages and the directional signage to access them.
- Manage parking garage fees to support their maximum utilization.
- Expand the parking kiosk system and increase public education around its use.
- Explore market-based pricing strategies for on-street parking downtown and within neighborhood business districts with an objective of maintaining approximately 10% of all on-street parking available at all times.

- Strengthen enforcement of the unregistered vehicle ordinance.
- Ensure that new developments provide off street parking to meet, but not exceed, their parking demand.
- Identify locations that are appropriate for car condos and collaborate with appropriate entities to ensure they are established and managed effectively.
- Expand regulatory support for shared and off-site parking to support the redevelopment and occupancy of existing buildings.



**Photo: Joseph Cote** 



Photos below and right: DPD





### Photo: DPD

### PROMOTE QUALITY URBAN DESIGN IN ALL TRANSPORTATION INFRASTRUCTURE PROJECTS.

 Incorporate thoughtful aesthetics and landscaping into transportation improvements.

- MERRIMACK RIVER CROSSINGS AIKEN ST BRIDGE 1883/1998 (Ouellette Bridge) Metal Pin connected Lenticular through truss fixed. 13K vehicles /day SCHOOL ST BRIDGE, 2005 (O'Donnell Bridge), rebuilt from 1917 bridge. Crossing dates to 1792. 34K vehicles/day UNIVERSITY AVE BRIDGE 2013 HUNT'S FALLS BRIDGE, RL38 BRIDGE ST BRIDGE, 1883/1998 (Richard P. Howe Senior Bridge) (Quinn Holmes Bridge) 1954 (John Cox Bridge): Warren Deck Truss. 3 Span Girder 22K vehicles/day Metal Rivet- connected Warren 158.5 meter fixed span. through truss fixed. 22K vehicles/day 16 K vehicles /day ROURKE BRIDGE - 1983 30 year old temporary bridge. 25K vehicles/day. Data Source: DPD
- Work to restore connections and breakup larger city blocks into smaller, better networked, walkable street grids where the historic street patterns have been lost.
- Respect and support historic preservation and design in the construction and reconstruction of bridges, roadways, and other transportation projects.
- Encourage urban scale roadway and intersection designs and discourage the application of overly generous suburban standards in these projects.

### BEAUTIFY AND ENHANCE GATEWAYS AND ENTRY POINTS.

- Work with MassDOT toward transforming the Lowell Connector into a Boulevard north of Plain Street and improve the traffic flow onto and from Thorndike Street to enhance safety and improve the transition from a highway to the urban street network.
- Conduct a citywide sign inventory and update signage as needed.
- Improve accessibility and coordination of way-finding signage for major points of interest, such as the local hospitals, institutions of higher education, places of historical significance, and cultural centers, exploring the incorporation of multi-lingual signage wherever feasible.

- Beautify major transportation corridors with street trees and other landscaping, as well as maintained signs, street lights, and other such amenities, where feasible.
- Forge partnerships with local entities and institutions to instill community pride and create a shared sense of ownership over beautification efforts.
- Explore the development of unique signage to define and celebrate Lowell's distinct neighborhoods.
- Encourage community-driven efforts to establish murals and public art as a means by which to beautify gateways and entry points, while remaining in keeping with historic guidelines.



The Lowell Connector reimagined as a boulevard SUSTAINABLE LOWELL 2025



Photo: DPD

HISTORIC CHARACTER & PRRESEN	PURE QUALITY BYEN	CMC LEATH & S.	ENGAGEMENT & SOCIAL E	RECREATION FOURTY	MULTIMOD, OPPORT	RESOURCE & IN.	COLLABORATION STOR	EDU LIARING LIARING	LOCALED LORANDON & TRANS	COMOMIC DEVELO	TRANSPARENCY JOB CREEK	IMFRASTRA & ACCOUNTAGE	WIROMMENTAL GILLTY	MATURAL RESOURCE & PO	CARBON CONSERVE	EMISSION REDUCE	EFFECTIVE & E.	ARTS & CO.	SHOPPING ATIONS	SENTERTAIN.	
MOBILITY AND ACCESS		0	$\odot$		(MA)		Æ			4		\$	<b>7</b>	W		<b>*</b>	<b>(3)</b>	8	್ಯಂ	0	
PROMOTE BIKE AND PEDESTRIAN MOBILITY.																					
INCREASE THE USE AND EFFICIENCY OF PUBLIC TRANSPORTATION.																					
IMPROVE ACCESS TO AND SUPPORT A VARIETY OF OPTIONS FOR SUSTAINABLE COMMUTING PRACTICES.																					
SUPPORT LAND-USE TRANSPORTATION POLICIES THAT ENCOURAGE MULTI-MODAL MOBILITY.																					
WHERE PRACTICAL, IMPROVE TRAFFIC FLOW AND THE CAPACITY OF THE CITY'S EXISTING STREETS.									•								•				
MINIMIZE THE TRANSPORTATION DEMAND GENERATED BY NEW DEVELOPMENT AND INSTITUTIONAL GROWTH.																					
MAXIMIZE PUBLIC SAFETY IN ALL MODES OF TRANSPORTATION.																					
ENSURE EFFICIENT FREIGHT TRANSPORTATION.																					
MAXIMIZE THE UTILITY OF AVAILABLE PARKING RESOURCES IN RETAIL AND RESIDENTIAL AREAS.																					
PROMOTE QUALITY URBAN DESIGN IN ALL TRANSPORTATION INFRASTRUCTURE PROJECTS.																					
BEAUTIFY AND ENHANCE GATEWAYS AND ENTRY POINTS.																					

# **VIBRANT & UNIQUE URBAN HUB**



owell will serve as a vibrant urban center that leverages its history, creativity, diversity, and physical environment to provide residents, businesses, visitors, shoppers, and potential investors with a unique, high-quality experience. Through this approach of creative place-making, Lowell will continue offering rich social, cultural and entertainment opportunities to existing residents while attracting newcomers to the city whose innovation and entrepreneurship can further strengthen the local economy.

**Photo: Higgins & Ross** 

# NÚCLEO URBANO VIBRANTE Y SINGULAR

មខ្លាមឈ្នួលគ្រួខដែលមានភាពស់វទើក និខម្មែកពីគេ

# CENTRO URBANO VIBRANTE E ÚNICO

Lowell servirá como un centro urbano vibrante que utiliza su historia, su creatividad, su diversidad y su ambiente físico para proveer una experiencia singular y de alta calidad para los(as) residentes, negocios, visitantes, compradores, y potenciales inversionistas. A través de un acercamiento creativo en la creación del sentido de "lugar", Lowell seguirá ofreciendo oportunidades ricas en lo social, lo cultural, y entrenamiento a los(as) residentes existentes mientras atraerá a la ciudad nuevas personas innovadoras, con espíritu empresarial, quienes fortalecerán aún más la economía local.

ឡូវ៉េល្អ នឹងជាមជ្ឍមណ្ឌលក្រុងដែលមានភាពរស់រជិក ដែលមាន
អនុភាពខាងប្រវត្តិសាស្ត្រ, ប្រឱ្យពញាណ, ភាពផ្សេងៗគ្នា, និងបរិស្ថាន
ជាក់ស្តែង ដើម្បីផ្តល់ឲ្យអ្នករស់នៅជាអចិន្ត្រៃយ៍, ពាណិជ្ជកម្ម, អ្នកមក
លេង, អ្នកទិញទំនិញ, និងអ្នកវិនិយោគសក្ដានុភូព នូវបទពិសោធន៍ប្លែក
ពីគេ និងបទពិសោធន៍ដែលមានគុណភាពខ្ពស់។ ពាមរយៈមធ្យោបាយ
នៃកន្លែងបង្កើតប្រកបដោយប្រឱ្យពញាណនេះ, ឡូវ៉េល្អនឹងបន្តផ្តល់ជូននូវ
ឱ្យកាសសង្គម, វប្បធម៌, និងកំសាន្តយ៉ាងច្រើន ដល់អ្នករស់នៅទីនោះ
រួចមកហើយ ខណៈដែលខាក់ទាញអ្នកចំណូលថ្មីឲ្យមកនៅទីក្រុងដែល
នវានុវត្តន៍និងសហគ្រិនរបស់ក្រុងអាចពង្រឹងសេដ្ឋកិច្ចប្រចាំតំបន់ឲ្យកាន់
តែខាំងឡើងថែមឡេត។

Lowell servirá como um centro urbano vibrante que tira partido da sua rica história, criatividade, diversidade e ambiente físico para fornecer aos seus residentes, empresários, visitantes, consumidores e investidores potenciais com uma experiência única, de alta qualidade. Através desta abordagem de "lugarização" criativa, Lowell continuará a oferecer oportunidades abundantes a nivel social, cultural, e lazer, para residentes, assim como atraindo recém-chegados à cidade, cuja inovação e empreendedorismo irão reforçar a economia local.

### **OBJECTIVES**

history.

Support local artists and members of the creative class,

and encourage more to live and work in Lowell.

Promote Lowell as a welcoming, safe, and attractive Invest in culture where culture happens. urban hub that serves the needs of residents, businesses, visitors, and other stakeholders. Enhance enjoyment, appreciation, and stewardship of Lowell's historic and cultural resources. Continue to encourage major regional and national retailers, especially those whose products enjoy Increase everyday arts, historical, cultural and exemptions from state sales taxes, to locate within recreational encounters of city residents. City limits to allow more Lowell residents to make Diversify participation in the arts. more of their retail purchases in the City, as opposed to surrounding towns and Southern New Hampshire. Invest in and promote arts, historical, and cultural Support and promote a diversity of high-quality shopping initiatives sustainably. and entertainment opportunities, prioritizing locallyowned businesses whose profits are more likely to be Actively promote the rehabilitation and reuse of remaining vacant mills and upper stories of commercial reinvested within the community. buildings in Downtown Lowell in ways that will reinforce Promote and market Lowell as a college town, and invest Lowell's downtown as an attractive and authentic urban in the faculty, staff, and student populations as major neighborhood with a robust daytime and evening/ economic drivers. weekend population, and a healthy mix of residential, Promote waterfront access and development downtown. commercial, retail, entertainment, and recreational amenities. Promote Lowell as a regional hub for arts, culture, and Increase accessibility to, from, and within the downtown.

# PROMOTE LOWELL AS A WELCOMING, SAFE, AND ATTRACTIVE URBAN HUB THAT SERVES THE NEEDS OF RESIDENTS, BUSINESSES, VISITORS, AND OTHER STAKEHOLDERS.



**Canal boat tour** 

**Photo: Emily Vidrine** 



The "Welcome Rainbow" outdoor amphitheatre at
North Common. "Welcome" is written in over two dozen
languages across the seats. Photo: Jennifer Myers

- Encourage the continued investment in and promotion of Lowell as a desirable place to live, work, and visit by UMass Lowell, Middlesex Community College, and other institutional partners and community groups.
- Ensure easy access to Lowell for day trips from Boston and other nearby cities.
- Encourage retail businesses to extend their hours so as to encourage a lively evening and weekend atmosphere.
- Maintain, properly light, and beautify public gateways and entry points into the City to help welcome tourists and regional shoppers.
- Maintain a safe, attractive and welcoming atmosphere in parking garages.

- Prioritize public infrastructure investments that promote a safe and comfortable walking environment while avoiding investments that will detract from this objective.
- Implement the recommendations of the Downtown Evolution Plan.
- Ensure continued maintenance of private property and public infrastructure throughout downtown to the standards of the Lowell Historic Board to protect the physical environment that is one of Downtown's strongest assets.
- Better utilize existing indoor and outdoor public spaces and support the development of new high quality public spaces, where appropriate.

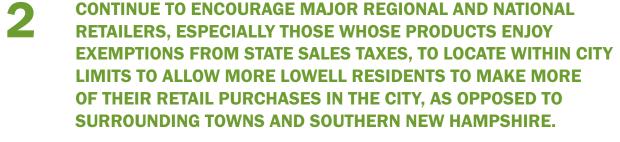
- Increase the amount and variety of outdoor seating in the Downtown, where appropriate, so as to encourage residents and visitors to populate and enliven public spaces.
- Encourage the development of additional hotel rooms downtown.
- Maintain and expand upon the downtown public Wi-Fi district, and ensure that every building has access to high speed telecommunications infrastructure.
- Practice aggressive enforcement of applicable laws and statutes to prevent late night disruptive and criminal behaviors from patrons of establishments that serve alcoholic beverages so as to avoid creating a negative image of the area or impacting other occupants of Downtown.



**Photo: Jane Albert** 



Many national chains, such as Best Buy, are opening outlets in urban settings. Photo: DPD



- Maintain and improve the physical appearance of retail corridors.
- Seek to improve vehicular access and incorporate pedestrian, bicycle, and transit access to and within regional retail areas of the city.
- Document retail spending patterns among Lowell's residents.
- Identify underserved market segments in the city that align with Lowell's demographics and market the city to national retailers as an under-retailed opportunity for growth.



Many commercial and regional retail areas dominated by shoppers arriving in motor vehicles would benefit from Access Management strategies that would improve safety and access for consumers. Such design approaches would manage the number and location of vehicular access points, and in turn, ensure the efficient use of roadway for pedestrians and bicyclists, as well as motor vehicles.



Photo: DPD

# SUPPORT AND PROMOTE A DIVERSITY OF HIGH-QUALITY SHOPPING AND ENTERTAINMENT OPPORTUNITIES, PRIORITIZING LOCALLY-OWNED BUSINESSES WHOSE PROFITS ARE MORE LIKELY TO BE REINVESTED WITHIN THE COMMUNITY.

- Actively support and promote existing entertainment opportunities, and encourage new types of entertainment that cater to Lowell's diverse audiences.
- Support the establishment of cultural amenities such as a movie theatre within the Downtown which will complement existing restaurant and retail offerings.
- Increase availability of essential retail services, such as grocery and hardware stores, by encouraging the establishment of new stores, or the expansion of existing markets in underserved neighborhoods of the city.
- Support existing small businesses and attract new independent businesses to locate in the Downtown and neighborhood business districts so as to complement existing shopping options.

- Support retail and restaurant businesses that cater to ethnic populations who are well-represented in Lowell, by helping them to simultaneously expand their markets beyond their primary niches and brand the City as an international marketplace.
- Support a high quality of service at local businesses and entertainment venues as a way to improve the overall patron experience.



Photo: DPD



**Photo: Merrimack Repertory Theatre** 



**Photo: Anne Ruthmann** 



Photo: Dick Howe, Jr.



PROMOTE AND MARKET LOWELL AS A COLLEGE TOWN, AND INVEST IN THE FACULTY, STAFF AND STUDENT POPULATIONS AS MAJOR ECONOMIC DRIVERS.

- Encourage UMass Lowell and Middlesex Community College (MCC) to develop marketing and incentive programs to motivate faculty and staff to purchase homes and condominiums in Lowell.
- Actively promote and support collegefriendly events that cater to students and residents under the ages of 21.
- Continue to stimulate and strengthen partnerships between UMass Lowell, MCC, and local businesses to provide student discounts, and opportunities for shared dining dollars off campus.
- Support the University in promoting the Tsongas Center and its array of concerts and events to students, while also encouraging UML to market more events to the public at large.
- Encourage the university to host classes and special events Downtown while exploring the relocation of appropriate university departments in this part of the city.

- Encourage construction of student housing within the Downtown, particularly in vacant upper stories of commercial buildings, so as to encourage students to live within close proximity of class, restaurants, and other entertainment opportunities.
- Continue to build upon the University's Orientation Week programming to familiarize students and their families with the city's history, and train them to become cultural and economic stewards.
- Because students benefit from the holistic educational experience supported by proximity to the Lowell National Historical Park, UMass Lowell campuses, and Middlesex Community College, as well as the diverse cultural environment of downtown, work to retain the High School as an institutional anchor in Downtown and plan for future facility improvements consistent with recommendations of the Downtown Evolution Plan.

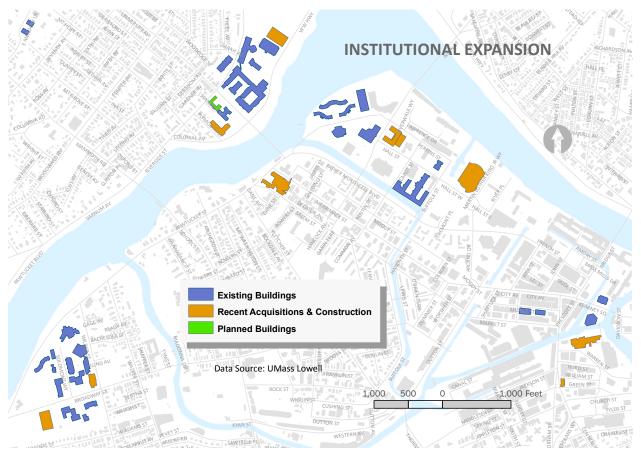
**Photo: Lisa Anderson-Bisson** 

**Photo: Jane Albert** 

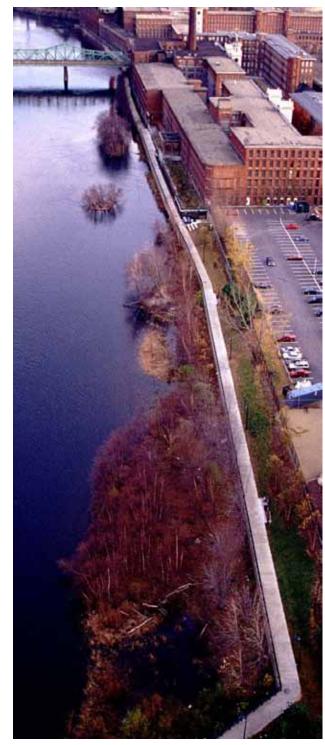
Using the Downtown Evolution Plan as a guide, strengthen the physical and conceptual linkages between the university campuses and the downtown so as to encourage pedestrian and bicycle connections between these destinations, and the redevelopment of priority sites, such as the Cox Circle area.



**Photo: UMass Lowell** 





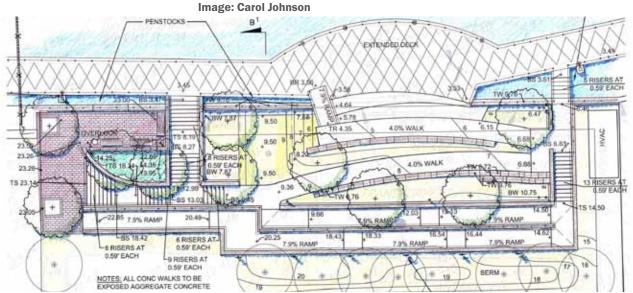


### PROMOTE WATERFRONT ACCESS AND DEVELOPMENT DOWNTOWN.

- Conduct a comprehensive survey of waterfront property, evaluating assets, opportunities, and potential impediments to redevelopment, recognizing that appropriate development at certain waterfront sites can effectively create waterway stewardship and improve their visibility within the city.
- Establish and promote a regulatory framework that encourages outdoor cafes and retail entrances along riverfront and canalside walkways, where appropriate.

- Enhance visibility of waterways from neighboring public streets and squares.
- Promote events and displays that celebrate the City's waterways, such as sprays, lighting, and environmental art.
- Support the extension of the Riverwalk and plan for future connections to the Concord River Greenway and other trail networks.
- Emphasize the importance of good stormwater management practices in preserving and enhancing the city's waterways.

Riverwalk Improvements at Bridge Street







Many cities feature water displays and celebrations along their natural waterfronts to create a sense of excitement. Providence, Rhode Island's WaterFire Festival draws thousands to its riverfront. Above is the Centennial Fountain on the Chicago River. Photo: Jeremya

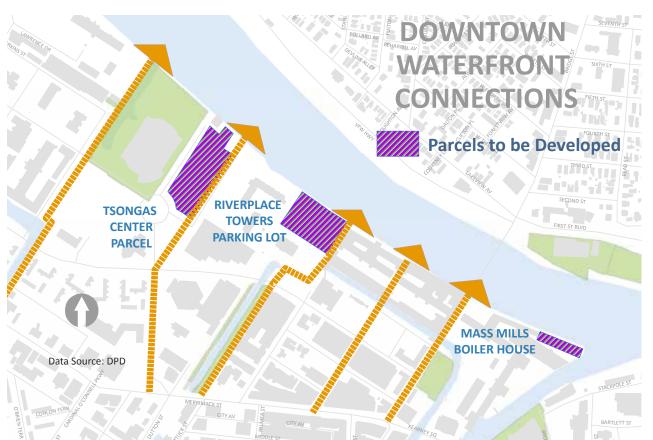






Photo: Higgins & Ross

# Film Festival

Lowell Is Alive. Unique, Inspiring!

Photo: COOL

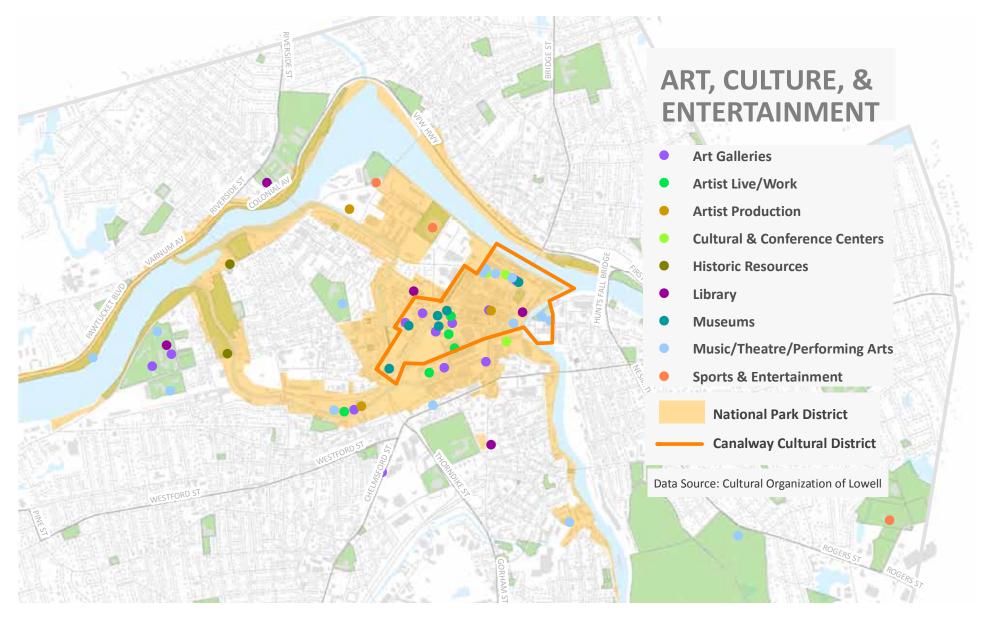
## PROMOTE LOWELL AS A REGIONAL HUB FOR ARTS, CULTURE, AND HISTORY.

- Continue to support an array of large scale festivals, events, and major cultural institutions as the anchors of the City's cultural ecosystem.
- Continue to actively promote and seek expansion of programming at existing cultural establishments, galleries, museums, theatres, and other entertainment venues, and work to attract new entities that support arts and cultural development.
- Support the recently-designated Lowell Canalway Cultural District and explore additional locations for cultural districts elsewhere in the city under the Massachusetts Cultural Council's program.

Draw upon the legacies of Jack Kerouac and other cultural icons as a way to strengthen the local creative economy.

- Convey the Smith Baker Center to a private party that will support its redevelopment as a cultural center or entertainment venue that would complement the offerings of Lowell's existing venues and institutions.
- Leverage the establishment of a large scale production studio in the region and continue to build upon and market Lowell's growing reputation as film industry destination for location filming.
- Identify and secure funding for the development of Point Park's largescale public art component, the maintenance and enhancement of the City's existing public art collection, and the installation of new public art that will enhance resident quality of life, promote community pride, and encourage continued economic investment.
- Aggressively pursue all available opportunities to increase public and private grant funding to support the city's creative and cultural economy.





Encourage opportunities for crosspromotion and marketing of events, including packaged ticketing, so as to capture the diverse arts programming of UMass Lowell, Middlesex Community College, and other institutions.

- Promote the Cultural Organization of Lowell Bus as a unique vehicle for engaging community members in cultural activities.
- Measure and monitor the impact of Lowell's creative economy over time.

Photo: COOL



### SUPPORT LOCAL ARTISTS AND MEMBERS OF THE CREATIVE CLASS, AND ENCOURAGE MORE TO LIVE AND WORK IN LOWELL.

Aggressively market Lowell as a community that welcomes and embraces its resident artists and creative entrepreneurs.

- Encourage the continued development of artist studios and live/work spaces.
- Target housing subsidies and affordable housing production in the downtown towards artists and other creative residents.
- Draw a regional crowd for arts and entrepreneurship training courses.
- Organize and promote round table discussions and public meetings to identify challenges and opportunities within the arts community.
- Develop an Artist-in-Residence Program to highlight local, innovative talent.
- Continue to highlight the work of local artists through the Open Studios event and other similar initiatives.



**Photo: Higgins & Ross** 

- Encourage local businesses and institutions to purchase, display, and promote the work of local artists.
- Support the establishment of a creative products store and publications to showcase the work of local artists.
- Draw upon the talents and abilities of local artists by encouraging them to supplement their own incomes through the teaching of community arts courses.
- Cultivate a population of young professionals and other potential patrons in Lowell who will support arts and cultural investment and encourage a creative atmosphere.

- Identify ways for artists and creative entrepreneurs to share equipment and other resources, so as to reduce their costs and foster collaboration.
- Provide access to training opportunities for creative entrepreneurs.
- Establish a Lowell-based, artist and consumer-driven online marketplace and promotional resource for local artists.





**Photo: The Lowell Plan** 

**Photo: DPD** 



**Photo: Western Avenue Studios** 



### **O** INVEST IN CULTURE WHERE CULTURE HAPPENS.

- Encourage the continued organization of community-driven cultural initiatives and ethnic events hosted in the City annually, promoting and supporting these efforts wherever feasible.
- Identify heavily utilized parks and public spaces, map the types of communitydriven cultural activities occurring therein during different seasons and times of day, and promote these events to the greater community.
- **Cambodia Town banners**
- Photo: Higgins & Ross

- Prioritize outdoor lighting, free public Wi-Fi, and electricity within parks and public spaces that are heavily utilized for neighborhood and community programs so as to encourage community-driven cultural activity.
- Provide a welcoming atmosphere for food trucks, and encourage them to park in locations with high levels of community activity by creating a regulatory framework that is efficient and cost-effective.
- Support creative place-making efforts, infrastructure improvements, and cultural investment around the Cambodia Town District, and explore the establishment of other districts that highlight specific cultures citywide.



Photo: COOL

### 9 ENHANCE ENJOYMENT, APPRECIATION, AND STEWARDSHIP OF LOWELL'S HISTORIC AND CULTURAL RESOURCES.

- Support organizations and events which highlight Lowell's rich historical and cultural roots.
- Ensure consistent, fair, and effective enforcement of historic district regulations and guidelines to preserve the character and integrity of historic resources in Lowell.
- Acknowledge and support efforts to expand Lowell's historic preservation initiatives beyond the National Park and mill era to include recognition and stewardship of historic resources from all eras of Lowell's past.
- Protect historic cemeteries by cultivating collaborations with neighborhood associations and community groups to act as stewards of these sites.
- Expand historic and architectural walking tour offerings, and explore the use of interactive technologies, such as cinema walking tours, smartphone applications, and other multimedia displays as a means by which to bring history and culture to life.
- Showcase exemplary projects which illustrate both sustainable building practices and historic preservation.

- Maintain and enhance Lowell Historic Board's neighborhood historic house marker program through neighborhood historic wayside exhibits, and develop a historic building marker program for downtown and in collaboration with property owners, exhibiting panels that detail building histories in public lobbies or storefront windows.
- Identify funding to digitize the municipal and historic archives currently stored in the City Hall attic, and make these resources available to the community.
- Maintain cultural and historic venues as safe and welcoming gathering spaces.



**Photo: Jane Albert** 



**Photo: Ashley Cantrell** 

"Mill Girl Dresses" along the canal

Photo: DPD

### 10 INCREASE EVERYDAY ARTS, HISTORICAL, CULTURAL AND RECREATIONAL ENCOUNTERS OF CITY RESIDENTS.

Support the painting of murals in schools as a means of encouraging creative participation and ensuring capital improvement.

- Continue to support and promote a high volume of free, family-friendly events and activities citywide.
- Educate residents and property owners about the benefits and value of historic preservation beyond the boundaries of the National Park as a catalyst for neighborhood preservation and revitalization.
- Explore and implement lower cost public art interventions like creatively repainting bridges and overpasses with bold colors and decorating bus shelters, utility boxes, and bike racks to highlight Lowell's ongoing transition from its industrial past to its future in the creative economy while ensuring that efforts remain consistent with Lowell Historic Board design standards.
- Develop a network of vibrant public spaces and performance stages citywide that can be programmed throughout all four seasons.



Mural on Middle Street
Photo: DPD

- Support the Lowell National Historical Park's expanding mission to serve the City as a whole, including continued collaborations with the Lowell Public Schools to ensure that all elementary school students have an opportunity to learn about their city's history and heritage.
- Identify locations to install poetry pedestals throughout the City's neighborhoods and develop a Poetry on Buses program in collaboration with the public schools, LRTA, and other local institutions to promote local writers.
- Seek to expand recreational programming offered by the City to Lowell residents.
- Develop permanent and semi-permanent museums and cultural centers to highlight Lowell's history, potentially filling underutilized spaces with artifacts and archives.
- Continue to promote the nascent busker and street performer program to support economic development and cultural visibility in areas with high volumes of foot traffic.

- Encourage Lowell residents who are not directly affiliated with the University to take advantage of cultural and academic offerings at UMass Lowell, and promote Lowell events to UMass Lowell and MCC affiliates.
- Support expanded partnerships between local artists and Lowell's elementary and secondary schools.



"The Path" cinema walking tour in Lawrence, MA educates residents and visitors about the history of the Pemberton Mill collapse. Photo: Dan Koff



**Photo: Greater Lowell Boys & Girls Club** 



### DIVERSIFY PARTICIPATION IN THE ARTS.

- Encourage organic arts and cultural programming throughout the city's schools and neighborhoods.
- Expand the variety of avenues for marketing so as to reach as broad a group of community members as possible.
- Promote the utilization of the City's interactive online community calendar to centralize information about events, and encourage broader engagement.
- Expand the use of social media so as to engage a greater number of students and youth in cultural happenings.
- Continue to support efforts that celebrate the unique customs of the city's cultural groups.

- Forge partnerships with ethnic and religious groups and expand promotional efforts around their festivals and community events.
- Translate marketing materials for arts and cultural events, and provide interpretation at events themselves, as needed.
- Ensure that festivals and events are accessible to people with disabilities.
- Increase programmatic offerings for seniors, families and young children.



Photo: COOL

**Photo: Lowell National Historical Park** 

74

## 12 INVEST IN AND PROMOTE ARTS, HISTORICAL, AND CULTURAL INITIATIVES SUSTAINABLY.

- Support the "greening" of festivals and events, including waste management planning that incorporates recycling and composting, and bike and pedestrian friendly transportation planning.
- Seek to improve pedestrian access between Western Avenue Studios, the 119 Gallery and the Downtown to maximize economic investment in the arts while reducing carbon emissions.
- Identify sustainable funding streams for arts and cultural programming, potentially including a Percent for the Arts policy, the Community Preservation Act, or other similar programs.
- Prioritize cultural promotion online and using recycled paper made from post-consumer content, when possible.



**Photo: Angela Vincent** 

Vertical garden mural at the 119 Gallery

Photo: Ashley Cantrell





The Assets Complex should be stabilized and redeveloped.

Photo: DPD



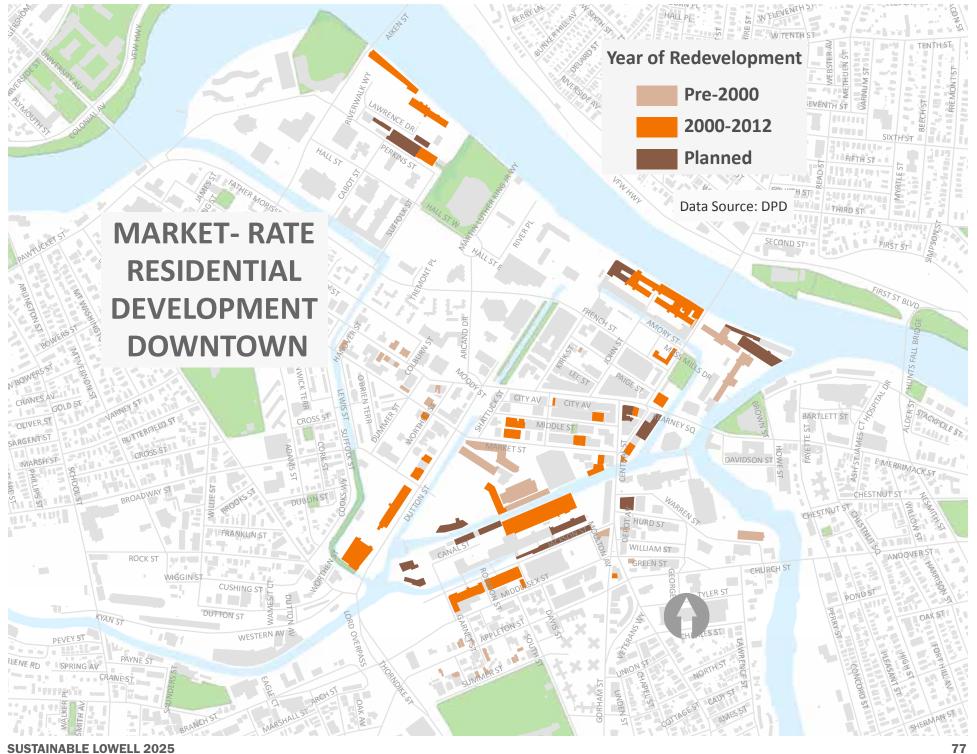
There are a number of opportunities to redevelop older industrial sites as industrial ruin parks, which serve economic, recreational, and historic purposes, and can add to the vitality of their surroundings. The Mill Ruins Park in Minneapolis serves such a purpose.

**Photo: Minneapolis Mill City Museum** 

One of Lowell's best transit-oriented development opportunities Photo: DPD

- ACTIVELY PROMOTE THE REHABILITATION AND REUSE OF REMAINING VACANT MILLS AND UPPER STORIES OF COMMERCIAL BUILDINGS IN DOWNTOWN LOWELL IN WAYS THAT WILL REINFORCE LOWELL'S DOWNTOWN AS AN ATTRACTIVE AND AUTHENTIC URBAN NEIGHBORHOOD WITH A ROBUST DAYTIME AND EVENING/WEEKEND POPULATION, AND A HEALTHY MIX OF RESIDENTIAL, COMMERCIAL, RETAIL, ENTERTAINMENT, AND RECREATIONAL AMENITIES.
- Develop and implement a Housing Development Zone for the Downtown under Massachusetts General Law Chapter 40V.
- Prioritize the use of existing subsidy programs to facilitate projects that have economic and redevelopment benefits in addition to housing and/or historic preservation value, and advocate for enhanced subsidy to close financing gaps which compromise the economic viability of Downtown redevelopment in Gateway Cities like Lowell.
- Support the redevelopment of the remaining undeveloped portions the Boott, Lawrence, Massachusetts, Hamilton, and Appleton Mills.
- Continue to promote the conversion of historic mill buildings and vacant upper stories of commercial buildings in the downtown area to residential units, artist live/work spaces, and other uses as deemed appropriate.
- Continue to take advantage of available opportunities to market and promote downtown Lowell as a city on the rise.







### INCREASE ACCESSIBILITY TO, FROM, AND WITHIN THE DOWNTOWN.

- Convert certain one-way streets to two-way operation consistent with the recommendations of the Downtown Evolution Plan.
- Increase access to public transportation opportunities, such as the Gallagher Terminal.
- Improve pavement markings and signage to help guide Lowell residents and visitors.

- Improve connections to the downtown from adjacent neighborhoods, and other parts of the city.
- Continue to improve handicap access through sidewalk and crosswalk improvements.
- Implement bicycle infrastructure, bike lanes, and sharrows (shared use lanes) throughout the city's Downtown and neighborhoods.
- Improve coordination and efficiency of traffic signals at Dutton/Market, Dutton/ Broadway, Dutton/Fletcher, and Father Morrissette/Cabot to improve traffic flow through the Downtown.
- Continue to improve the management and operations of public on-street and off-street parking downtown to ensure convenience and availability for residents, visitors, shoppers and other users.



New Handicap-accessible crosswalks in Downtown







HISTORIC CHARACTER & PRESERVE	PUBLIC QUALITY & VAN.	CMC E. REALTH & SA.	MGAGEMENT OF SOCIAL EX	RECREATION OF TOUTH	MULTIMODE TOWAL OPPORTO	CESOURCE & MEO TRANSPORTE.	COLLABORASION SHE	EDUC PARTMERS	LOCAL ECO.	The state of the s	DAMSPARENCY JOB CREAT	INVERDE TRUE OUNTABLE	WINDOWNER THAT I THE THINK IN THE	LATURAL RESOUR	CARBON C. CONSERVICY	EMESION REDUC	EFFECTIVE & EV.	ARTS & COLEMI OPERAL.	SHOPPING TIONS	& ENTERTAINME	
VIBRANT AND UNIQUE URBAN HUB		6	$\odot$				Æ			4		\$	3	W		<b>₹</b> >	<b>3</b>	3	್ಯಂ	0	
PROMOTE LOWELL AS A WELCOMING, SAFE, AND ATTRACTIVE URBAN HUB THAT SERVES THE NEEDS OF RESIDENTS, BUSINESSES, VISITORS, AND OTHER STAKEHOLDERS.																					
CONTINUE TO ENCOURAGE MAJOR REGIONAL AND NATIONAL RETAILERS, ESPECIALLY THOSE WHOSE PRODUCTS ENJOY EXEMPTIONS FROM STATE SALES TAXES, TO LOCATE WITHIN CITY LIMITS TO ALLOW MORE LOWELL RESIDENTS TO MAKE MORE OF THEIR RETAIL PURCHASES IN THE CITY, AS OPPOSED TO SURROUNDING TOWNS AND SOUTHERN NEW HAMPSHIRE.																					
SUPPORT AND PROMOTE A DIVERSITY OF HIGH- QUALITY SHOPPING AND ENTERTAINMENT OPPORTUNITIES, PRIORITIZING LOCALLY-OWNED BUSINESSES WHOSE PROFITS ARE MORE LIKELY TO BE REINVESTED WITHIN THE COMMUNITY.				•			•		•			•			•		•				
PROMOTE AND MARKET LOWELL AS A COLLEGE TOWN, AND INVEST IN THE FACULTY, STAFF, AND STUDENT POPULATIONS AS MAJOR ECONOMIC DRIVERS.																					
PROMOTE WATERFRONT ACCESS AND DEVELOPMENT DOWNTOWN.																					
PROMOTE LOWELL AS A REGIONAL HUB FOR ARTS, CULTURE, AND HISTORY.																					

HISTORIC CHARACTER & PRESENT	PUBLIC QUALITY & VA.	CNICE HEALTH & SA	ENGAGEMENT & SOCIAL EC	RECREA!	MULTI-MOUNT OPPORTO	DESOURCE & MATRAMSPORTE.	COLLABORA	EDUC PARTMERS	LOCAL ECC.	COMONIC DEVELORION	TRANSPARENCY JOB CREAT	WEARSTER & POCOUNTARD	WIROMMENTAL!	OLAMING & PO	CARBON E. CONSERVICE	EMESION REDUCE	EXPECTIVE & EX.	ARTIS & CUL	SHOPPING TIONS	G & EMTERIAMINI	
VIBRANT AND UNIQUE URBAN HUB		6					Ø₹0			_		\$	7	W		<b>\$</b>	<b>(3)</b>	8	o <sub>o</sub> o	0	
SUPPORT LOCAL ARTISTS AND MEMBERS OF THE CREATIVE CLASS, AND ENCOURAGE MORE TO LIVE AND WORK IN LOWELL.																					
INVEST IN CULTURE WHERE CULTURE HAPPENS.																					
ENHANCE ENJOYMENT, APPRECIATION, AND STEWARDSHIP OF LOWELL'S HISTORIC AND CULTURAL RESOURCES.																					
INCREASE EVERYDAY ARTS, HISTORICAL, CULTURAL, AND RECREATIONAL ENCOUNTERS OF CITY RESIDENTS.																					
DIVERSIFY PARTICIPATION IN THE ARTS.																					
INVEST IN AND PROMOTE ARTS, HISTORICAL, AND CULTURAL INITIATIVES SUSTAINABLY.																					
ACTIVELY PROMOTE THE REHABILITATION AND REUSE OF REMAINING VACANT MILLS AND UPPER STORIES OF COMMERCIAL BUILDINGS IN DOWNTOWN LOWELL IN WAYS THAT WILL REINFORCE LOWELL'S DOWNTOWN AS AN ATTRACTIVE AND AUTHENTIC URBAN NEIGHBORHOOD WITH A ROBUST DAYTIME AND EVENING/WEEKEND POPULATION, AND A HEALTHY MIX OF RESIDENTIAL, COMMERCIAL, RETAIL, ENTERTAINMENT, AND RECREATIONAL AMENITIES.									•												
INCREASE ACCESSIBILITY TO, FROM, AND WITHIN THE DOWNTOWN.																					

## HEALTHY AND SUSTAINABLE LOCAL ECONOMY



owell will strive to create a healthy, self-sufficient local economy that will be sustainable in the face of looming macroeconomic changes. To accomplish this goal, the city will seek to improve education and increase the competitiveness of its workforce, help the city's existing institutions and businesses to thrive, encourage creative and environmentallyfriendly development and redevelopment, and spur job growth by both targeting growing industry sectors and cultivating a new generation of local entrepreneurs.

**Photo: Meghan Moore** 

# ECONOMÍA LOCAL យេដ្ឋាំ SALUDABLE និទនា Y SOSTENIBLE

### សេដ្ឋអិច្ចម្រចាំងំបស់មានផលល្អ សិចអាចច្រូវធ្ងខ់បាន

Lowell buscará crear una economía local saludable y auto-suficiente que será sostenible de cara a los cambios macroeconómicos inminentes. Para lograr dicha meta, la ciudad buscará mejorar la educación y aumentará la competividad de la fuerza laboral, ayudará a las instituciones y negocios existentes para que prosperen, animará el desarrollo y la reurbanización creativo y ecológico, y estimulará el crecimiento en puestos de trabajo enfocándose en sectores industriales crecientes y la cultivación de una nueva generación empresarial.

ទ្បូដែល្ល នឹងខ្ទះខ្មែងបង្កើតសេដ្ឋកិច្ចដែលមានចំណូលច្រើន, ម្ចាស់ការ លើខ្លួនឯងនៅក្នុងតំបន់ ដែលនឹងអាចទ្រទ្រង់បាន ថ្វីបើការផ្លាស់ប្តូរ ម៉ាក្រូសេដ្ឋកិច្ចបានផុសឡើង។ ដើម្បីសំដចគោលដៅនេះ, សាលាក្រុង នឹងស្វះស្វែងធ្វើការសិក្សាអប់រំកាន់តែប្រសើរឡើង ហើយបង្កើនភាពប្រ កួតប្រជែងផ្នែកថាមពលពលកម្ម, ជួយស្ថាប័ន និងពាណិជ្ជកម្មដែល មានរួចមកហើយ ឲ្យចំជីនលូតលាស់, ជួយជំរុញឲ្យមានការអភិវឌ្ឍន៍ ដោយប្រឌិតញាណនិងមិនបះពាល់ដល់បរិស្ថាន និងការអភិវឌ្ឍន៍ ដោយប្រឌិតញាណនិងមិនបះពាល់ដល់បរិស្ថាន និងការអភិវឌ្ឍន៍ឡើង វិញ, ហើយជំរុញឲ្យបង្កីនការងារ ដោយទាំងផ្ដោតទៅលើការរីកចំជីន ផ្នែក ឧស្សាហកម្ម និងបណ្តុះបណ្តាលឲ្យអ្នកជំនាន់ក្រោយជាសហគ្រិន ប្រចាំតំបន់។

#### ECONOMIA LOCAL SAUDÁVEL E SUSTENTÁVEL

Lowell procurará criar uma economia local saudável, auto-suficiente que será sustentável em face das iminentes mudancas macro-econômicas. Para atingir este objectivo, a cidade procurará melhorar a qualidade do sector educativo e intensificar a competitividade da sua força de trabalho, ajudar existentes instituições e empresas a prosperar, estimular construção e desenvolvimento criativo e sustentável, e fomentar o crescimento do emprego não só entre sectores industriais correntemente em expansão mas também através da cultivação de uma nova geração de empreendedores locais.

#### **OBJECTIVES**

1	Prioritize programs and initiatives with strong promise of creating employment opportunities for Lowell residents, and strive to continue increasing employment rates in the City.	10 11	Support the health services industry to maintain high- quality, accessible health care to Lowell residents. Continue to prioritize support for the implementation of the Hamilton Canal District Master Plan and larger
2	Increase competitiveness of the local workforce, expand career education and job training to match workforce needs, and provide placement opportunities for the		JAM Urban Revitalization and Development Plan to create new opportunities for economic development in Downtown and surrounding neighborhoods.
3	City's residents. Improve foundational education to better prepare the City's youth for future employment and participation in	12	Explore opportunities for commercial urban agricultural production and distribution as an economic activity as well as a local food source.
4	the local economy.  Create opportunities for existing businesses to thrive, reinvest in the local economy, and become more	13 14	Strengthen and enhance existing industrial and commercial areas and develop new sites for business opportunities.
	competitive in the regional, national, and international marketplace.		Complete and begin implementation of the Ayer's City Industrial Park Plan as an urban renewal project
5	Increase support for small and minority-owned businesses.		designed to create additional industrial, commercial, and retail expansion sites, provide additional
6	Attract new businesses to the city by targeting growing industry sectors that align well with the Greater		employment opportunities for Lowell residents, and grow the City's tax base.
	Lowell region's resources, workforce, and competitive advantage.	<b>15</b>	Continue to expand the City's cluster strengths, including its environmental and environmentally-
7	Create a culture of innovation and entrepreneurship.		sustainable businesses, institutions, and industry.
8	Increase the capacity of our local institutions to become economic engines for the community as a whole.	16	Repurpose vacant or under-utilized spaces for new, creative uses to eliminate blight that may discourage investment in surrounding properties.
9	Target, assess, and remediate brownfields for		

SUSTAINABLE LOWELL 2025 85

redevelopment to improve the quantity and variety of

available commercial, office and retail space.



Youth summer jobs

**Photo: Career Center of Lowell** 



**Photo: Career Center of Lowell** 



Youth summer jobs registration

**Photo: Career Center of Lowell** 

## PRIORITIZE PROGRAMS AND INITIATIVES WITH STRONG PROMISE OF CREATING EMPLOYMENT OPPORTUNITIES FOR LOWELL RESIDENTS, AND STRIVE TO CONTINUE INCREASING EMPLOYMENT RATES IN THE CITY.

- Evaluate investments, events, and initiatives based on documented or documentable potential to result in positive economic growth.
- Support initiatives that assist populations who often have difficulty securing work opportunities - such as teenagers, singleparents, and non-English speakers - with local job opportunities.
- Encourage major employers in the City, including institutions, non-profits, and commercial businesses, to prioritize hiring of qualified Lowell residents to the extent permissible by law, and seek commitments to hiring Lowell residents from businesses assisted with direct loans or grants, tax benefits, or other programs and initiatives.

- Identify and prioritize participation in inter-municipal partnerships based on the potential for Lowell residents to obtain employment opportunities with businesses in Lowell or partner communities.
- Support initiatives that foster the growth and development of new entrepreneurial efforts that will ultimately result in job creation.

## 2 INCREASE COMPETITIVENESS OF THE LOCAL WORKFORCE, EXPAND CAREER EDUCATION AND JOB TRAINING TO MATCH WORKFORCE NEEDS, AND PROVIDE PLACEMENT OPPORTUNITIES FOR THE CITY'S RESIDENTS.

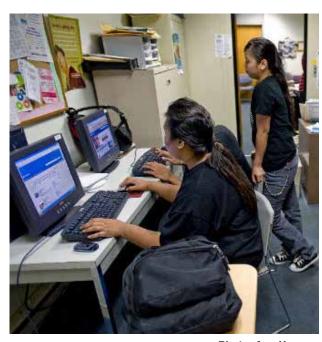
- Actively work to identify short and longterm labor market needs and align education and training to match.
- Encourage Lowell's secondary and higher educational institutions to develop a coordinated online clearinghouse to connect students, residents, employers and other community stakeholders with a public platform for communication about internship and work opportunities.
- Continue to work with the Career Center of Lowell and Workforce Investment Board to provide workforce training fund "on-thejob" training grants for existing and new employers.
- Increase corporate education and strengthen collaboration between local private employers and local educational institutions.
- Increase the availability of English-asa-second-language (ESL) classes and programs, striving to offer them at a variety of times and locations, so as to accommodate as many interested residents as possible.

- Support and promote the availability of technical assistance, certification programs, and "soft-skilled" classes for recent unemployed residents through the Workforce Investment Board and Career Center of Lowell, including but not limited to: assistance with resume writing, job interviewing, job placement, job readiness, work appearance, customer service, on-the-job etiquette, financial literacy, entrepreneurship training, and legal counseling.
- Encourage employers and educational institutions to make internships and job opportunities available to existing students and recent graduates of local secondary and higher education institutions to help local youth build their careers and retain their talents in the community.
- Encourage recent college graduates to remain in the City by providing this population with a variety of attractive job opportunities, as well as attractive housing options and cultural amenities.



**Career Center training program** 

**Photo: Robert McIntosh** 



**Photo: Ann Hermes** 



**Photo: UMass Lowell** 

# CAPEN

**Photo: CBA** 

## IMPROVE FOUNDATIONAL EDUCATION TO BETTER PREPARE THE CITY'S YOUTH FOR FUTURE EMPLOYMENT AND PARTICIPATION IN THE LOCAL ECONOMY.

- Continue efforts to make Lowell's public education system one of the best school systems in Massachusetts.
- Ensure all children have equal access to quality education, and all Lowell families have opportunities for choices among quality, public, private, and charter schools.
- Support efforts to retain federal and state funding for early childhood education, and support local organizations and institutions invested in this work in their efforts to maintain or expand available programs.
- Promote science, technology, engineering, math and arts programs in the local education system and invest in infrastructure improvements, as needed, to prepare students with both the skills and creativity to fuel their future careers.
- Continue to support institutions and organizations that provide holistic education and opportunities for youth outside of formal classroom settings.
- Strengthen partnerships between our schools and institutions of higher education to establish shared educational, mentoring, summer and recreational programs.
- Increase graduation and higher education enrollment rates among Lowell's high school graduates by reducing barriers to "at risk" teens and families, including support for efforts to link these students with scholarship and financial aid opportunities.



**Photo: Robert Anderson** 

## CREATE OPPORTUNITIES FOR EXISTING BUSINESSES TO THRIVE, REINVEST IN THE LOCAL ECONOMY, AND BECOME MORE COMPETITIVE IN THE REGIONAL, NATIONAL, AND INTERNATIONAL MARKETPLACE.

- Continue to provide a variety of technical and financial assistance programs to existing businesses, while documenting and monitoring their effectiveness in order to best target limited resources.
- Through thoughtful rate setting and utilization of available tax increment abatement programs, implement local commercial real estate and personal property taxes in a manner that ensures costs remain affordable and competitive with other surrounding communities.
- Work with property owners, brokers, and the city's Division of Development Services to limit non-commercial uses from encroaching into prominent commercial and industrial areas.
- Assist existing businesses to save on energy costs by becoming more "green" (i.e. energy audits and other financial assistance programs to purchase energyefficient equipment; recycling and composting).

- Respond to businesses' labor force needs by promoting partnerships with local institutions of higher education and the Career Center of Lowell/Workforce Investment Board.
- Utilize the City's marketing campaign and networking events to help existing businesses reach their target audiences.
- Work to reduce the disparity between the commercial and residential tax rates by actively encouraging additional real estate development and growing the overall tax base without raising residential taxes or cutting needed revenue.
- Encourage utility and communications companies to improve and maintain their infrastructure at the highest standards possible to ensure that commercial and industrial sites in Lowell have access to the best available technology and utility services.



Bricks & Clicks is a business model that enables a company to integrate both offline (bricks) and online (clicks) presences.

Photo: Dossierartikelen



**Photo: Boston Chowder** 



#### INCREASE SUPPORT FOR SMALL AND MINORITY-OWNED BUSINESSES.

- Identify barriers to collaboration and communication with minority-owned businesses.
- Support local partner agencies in evaluating and identifying market opportunities through community assessment and market analysis.
- Support the establishment of a shipping, printing, and business services retail outlet within Lowell as a resource for small businesses and entrepreneurs.
- Evaluate how public information, application requirements and fees impact access of diverse populations to community resources and business opportunities, and making adjustments accordingly.
- Increase outreach regarding existing economic development initiatives to minority entrepreneurs and businesses in culturally competent ways.

- Identify specific resource needs among minority businesses and entrepreneurs, and develop programming efforts consistent with addressing those needs.
- Provide training and outreach materials in multiple languages.
- Partner with trusted and respected local cultural organizations and institutions when reaching out to businesses so as to facilitate connections with specific minority groups.

Photo: Merrimack Valley Small Business
Assistance Center



**Photo: CBA** 

90

## ATTRACT NEW BUSINESSES TO THE CITY BY TARGETING GROWING INDUSTRY SECTORS THAT ALIGN WELL WITH THE GREATER LOWELL REGION'S RESOURCES, WORKFORCE, AND COMPETITIVE ADVANTAGE.

- Target businesses compatible with local and regional industry clusters/trends (advanced manufacturing; defense contracting; software & information technology; biotechnology; green technologies; creative economy; and healthcare & educational sectors).
- Leverage Lowell's geographic placement by continuing to participate in the "Middlesex 3" branding campaign and other regional marketing efforts.
- Encourage existing companies in Lowell to become ambassadors for the City and help recruit new businesses.

- Continue to offer a variety of technical and financial assistance programs to companies wishing to relocate in Lowell, while documenting and monitoring their effectiveness in order to better target limited resources.
- Continue to improve and market the city as "business friendly" by streamlining permitting and licensing processes with an emphasis on transparency, fairness, and efficiency.
- Encourage the development of LEED (Leadership in Energy and Environmental Design) certified buildings for major commercial rehabilitation projects and new construction.



**Photo: UMass Lowell** 



**Photo: Xenith** 



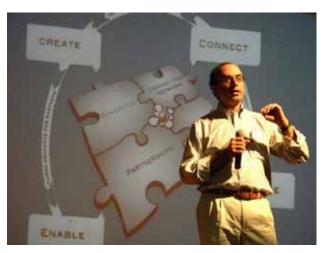
PlumChoice Ribbon-Cutting

**Photo: Jennifer Myers** 



Maker Spaces – such as the *Artisan's Asylum* in Somerville, Massachusetts – are community-operated places that encourage the exchange of equipment and expertise.

Photo: DPD



**Photo: Merrimack Valley Sandbox** 



**Photo: Merrimack Valley Sandbox** 

#### CREATE A CULTURE OF INNOVATION AND ENTREPRENEURSHIP.

- Promote the creative economy in Lowell.
- Support local entrepreneurial efforts and the institutions that spearhead them, including pitch contests, and community and campus catalyst programs, among others.
- Create co-working and incubator spaces with a specific priority on locations where the facilities can help leverage redevelopment of buildings and where nearby properties afford opportunities for the incubators to grow in place.
- Partner with local financial institutions and other economic development partners to provide venture capital, technical support, and "creative" financial assistance programs to local entrepreneurs and start-ups.
- Explore the feasibility of expanding state of the art telecommunications infrastructure to increase broadband access and free Wi-Fi hot spots in Downtown and throughout the city.

- Support the establishment of a kitchen incubator to encourage growth of homebased, food-related businesses.
- Revise zoning as needed to support and regulate the development of small-scale manufacturing operations as a distinct land-use with different impacts than larger-scale traditional manufacturing.
- Build trust and open communication between the City and its businesses.
- Encourage the local business community to re-invest in the local economy by procuring goods and services from local vendors whenever possible and continuing a strong track record of support for local philanthropic initiatives.
- Explore tax and financing policies and programs that can allow for phasing in of costs in conjunction with the growth of new businesses as a way to support entrepreneurial efforts.

#### INCREASE THE CAPACITY OF OUR LOCAL INSTITUTIONS TO BECOME ECONOMIC ENGINES FOR THE COMMUNITY AS A WHOLE.

- Encourage leading institutions to continue to improve and expand their physical campus environments in accordance with the City's Sustainability Plan, and eliminate obstacles that may discourage continued physical growth of these institutions within the city.
- Encourage leading institutions to better share resources, including but not limited to physical space, equipment, and energy.
- Implement fair PILOT (Payment in Lieu of Taxes) Agreements between the City, major institutions, and non-profit organizations to reflect their use of City services and ensure that other commercial and residential tax payers are not required to subsidize them.
- Encourage the state, the UMass system and the community college system to grant greater fiscal autonomy and decision-making authority to the local institutions.

- Promote partnerships between Middlesex Community College, UMass Lowell, and other economic development partners to increase visibility and marketing of the City's institutional assets and venues.
- Continue to attract and retain companies in the health-care industry, including biotech firms that create innovative medical devices for use by health care providers.
- Continue to support the Massachusetts Medical Device Development Center (M2D2) at UMass Lowell as a vehicle for economic development and emerging medical technologies.



**Photo: UMass Lowell** 



Emerging Technologies and Innovation Center
Photo: UMass Lowell



#### TARGET, ASSESS, AND REMEDIATE BROWNFIELDS FOR REDEVELOPMENT TO IMPROVE THE QUANTITY AND VARIETY OF AVAILABLE COMMERCIAL, OFFICE AND RETAIL SPACE.

- Develop a plan for guiding and expanding the City's brownfields programs.
- Identify funding sources and provide technical assistance to assist private property owners with investigation and remediation costs.
- Identify tax title and urban renewal acquisition properties with documented or perceived environmental contamination, develop plans for the reuse of these properties, and obtain funding to assess and address the contamination to facilitate the implementation of these plans.
- Promote and market the City's track record of successful brownfields redevelopment to help call positive attention to these opportunities and create broader recognition of the viability of brownfield sites for a wide range of potential developments.
- Utilize federal and state funding resources available for brownfields to test. remediate, and convert eligible properties to new uses.





Brownfields environmental cleanup Photo: Watermark Environmental, Inc.

## 10 SUPPORT THE HEALTH SERVICES INDUSTRY TO MAINTAIN HIGH-QUALITY, ACCESSIBLE HEALTH CARE TO LOWELL RESIDENTS.

- Support the fiscal stability of the city's leading medical institutions.
- Continue to support the physical and capital expansion of Lowell General Hospital and its acquisition of the former Saints Memorial Medical Center, working to ensure that both campuses remain viable and available to Lowell residents for healthcare services.



Lowell General Hospital has undergone construction on a new state of the art building. Launched in 2010, the Legacy Project has expanded the emergency and trama centers to nearly three times their previous size, including 100 new beds and three operating rooms.

**Photo: Lowell General Hospital** 

- Continue to support the Lowell Community Health Center (LCHC) and its growth as a primary medical resource for substantial numbers of Lowell residents.
- Continue to fund the Lowell Senior Center and maintain the quality of services provided to our aging population.
- Promote partnerships between the City's Health and Recreation Departments, our School Department, and our local health care providers that target health prevention programs for our youth and atrisk populations.
- Promote physical activity and public health by providing well-maintained recreational facilities and programs throughout the city, prioritizing infrastructure for multimodal transportation, and encouraging land use patterns that promote healthier lifestyles.
- Partner with local educational institutions and the Workforce Investment Board to prepare our future workforce for the growing medical field.



SUSTAINABLE LOWELL 2025 95



# 11 CONTINUE TO PRIORITIZE SUPPORT FOR THE IMPLEMENTATION OF THE HAMILTON CANAL DISTRICT MASTER PLAN AND LARGER JAM URBAN REVITALIZATION AND DEVELOPMENT PLAN TO CREATE NEW OPPORTUNITIES FOR ECONOMIC DEVELOPMENT IN DOWNTOWN AND SURROUNDING NEIGHBORHOODS.

- Work with developers and potential tenants to facilitate the construction of the residential and commercial buildings outlined in the Hamilton Canal District Master Plan.
- Actively seek subsidy to bridge financing gaps between the costs of construction and economic returns available in the current market, while simultaneously working to strengthen the market to diminish the gaps for future projects.
- Aggressively market the real estate opportunities available to potential commercial tenants and residents in the Hamilton Canal District.
- Work closely with the master developer, state and federal agencies and elected officials to identify and secure additional funding for the on-site and off-site infrastructure needed to support the full build-out of the Hamilton Canal District, including the extension of Jackson Street, reconstruction of the Lord Overpass, construction of the Signature Bridge, construction of the Phase II of the on-site infrastructure, construction of a parking structure, and extension of the trolley system, among other projects identified in the Master Plan and MEPA filings.
- Continue to advocate for the passage of Congressional legislation that will allow the Lowell National Historical Park lots to be incorporated into the Hamilton Canal District development site and subsequently work with the LNHP to facilitate this redevelopment.

Hamilton Canal District Illustrative Plan Image: Trinity Financial

- Work with State Legislative and Administrative partners to secure funding for and construct the Lowell Trial Court.
- Encourage private redevelopment of other sites throughout the JAM Plan area whose market potential is enhanced as a result of the construction of the Early Garage and Hamilton Canal District.
- Work in collaboration with the Lowell Downtown Neighborhood Association, Jackson, Appleton, Middlesex, Business and Resident Association and other community stakeholders to welcome new residents to area through the promotion of events that build a sense of community and highlight Lowell's variety of positive attributes.
- Continue to support the Hamilton Crossing Project, including the expansion efforts of the Lowell Community Health Center, the development of the Counting House Lofts, and subsequent residential and commercial tenancies in the former Hamilton Mills.

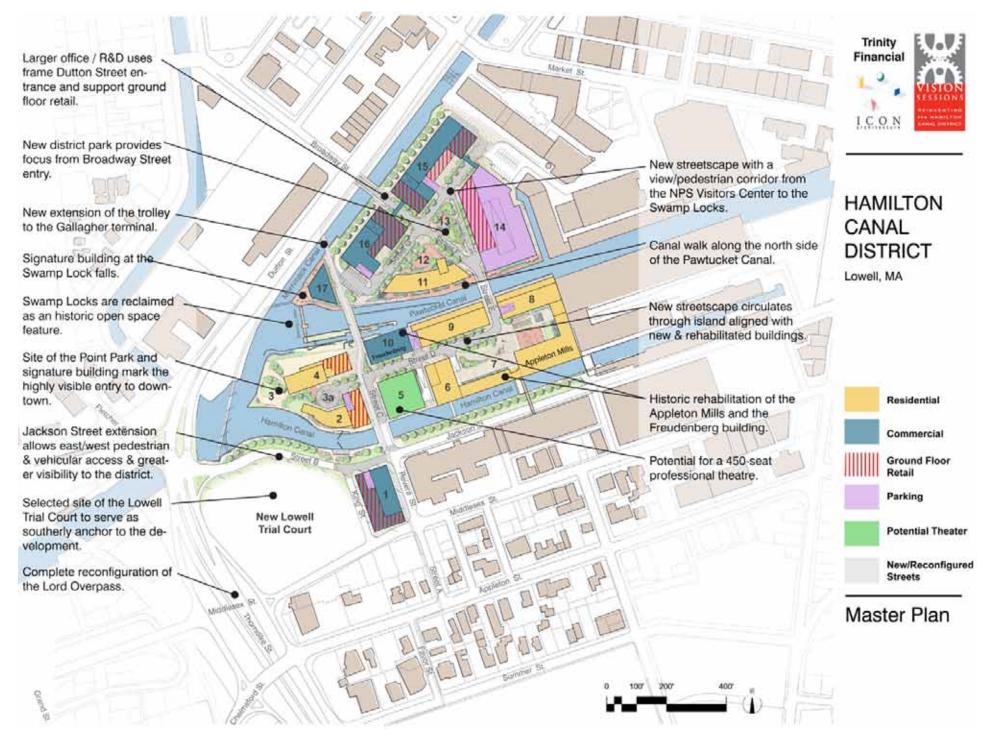


The Justice Center aims to be carbon neutral.

**Image: Neoscape** 



**Image: Trinity Financial** 



## **12** EXPLORE OPPORTUNITIES FOR COMMERCIAL URBAN AGRICULTURAL PRODUCTION AND DISTRIBUTION AS AN ECONOMIC ACTIVITY AS WELL AS A LOCAL FOOD SOURCE.

- Identify appropriate locations for large scale urban agricultural development.
- Support the creation and adoption of zoning and other policy that will encourage urban agricultural activities.
- Support agricultural initiatives that may be viable in an urban setting, including fish farming, vertical gardening, and other commercial-scale local food production initiatives.



Fish farming involves raising fish commercially in tanks as a means by which to supplement a species' natural numbers and meet the growing demand for fish internationally.

Photo: Charlie Vinz





New Crop urban farm in Chicago

**Photo: New Crop Chicago** 

Community Greenhouse Photo: Adrien Bisson

## 13 STRENGTHEN AND ENHANCE EXISTING INDUSTRIAL AND COMMERCIAL AREAS AND DEVELOP NEW SITES FOR BUSINESS OPPORTUNITIES.

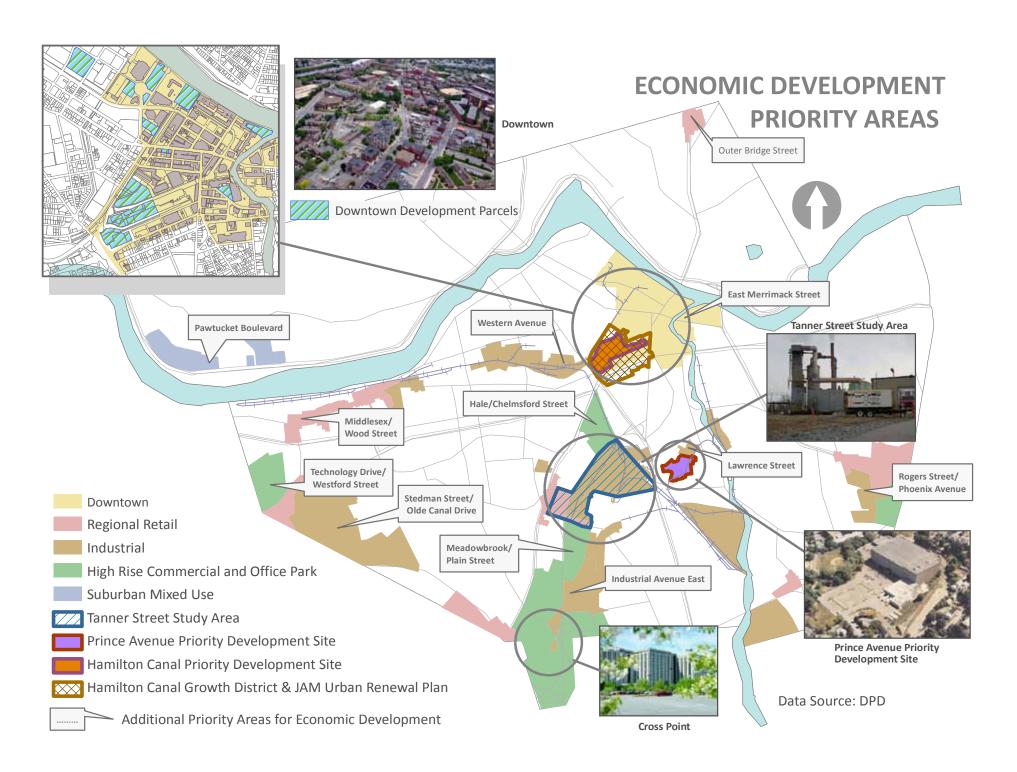


Eco-Industrial Parks utilize waste from each plant for the supply cycle of adjacent operations. While the central concept is most likely not relevant to Lowell's situation, many of the goals could be quite useful for industrial parks and clusters such as district heating, recycling, and shipping and receiving. The Fort Devens Project, shown here, incorporates these features into their plans.

**Photo: David Ryan** 

- Discourage and, where possible, prohibit encroachment of residential and institutional uses into viable industrial areas.
- Maintain and improve transportation access to industrial and commercial areas.
- Encourage property owners to adequately maintain their buildings and land to reinforce a positive image of the city's industrial areas.
- Work to match prospective businesses with available vacant spaces in industrial areas.
- Eliminate unnecessary permitting requirements and streamline processes for industrial areas, designating additional areas as Priority Development Sites under Massachusetts General Law Chapter 43D, where appropriate.

- Promote additional infill commercial development in office park, regional retail, and high-rise commercial districts, and in the area near the Gallagher Terminal in a manner which increases the accessibility and attractiveness of these areas for pedestrians, cyclists, transit riders, as well as motorists.
- Encourage owners of historic commercial buildings in the Downtown and neighborhood business districts to rehabilitate and improve existing but under-utilized upper-story space as higher quality and more marketable office space.
- Identify new areas that are eligible for light industrial development and amend the zoning map accordingly.



SUSTAINABLE LOWELL 2025 101

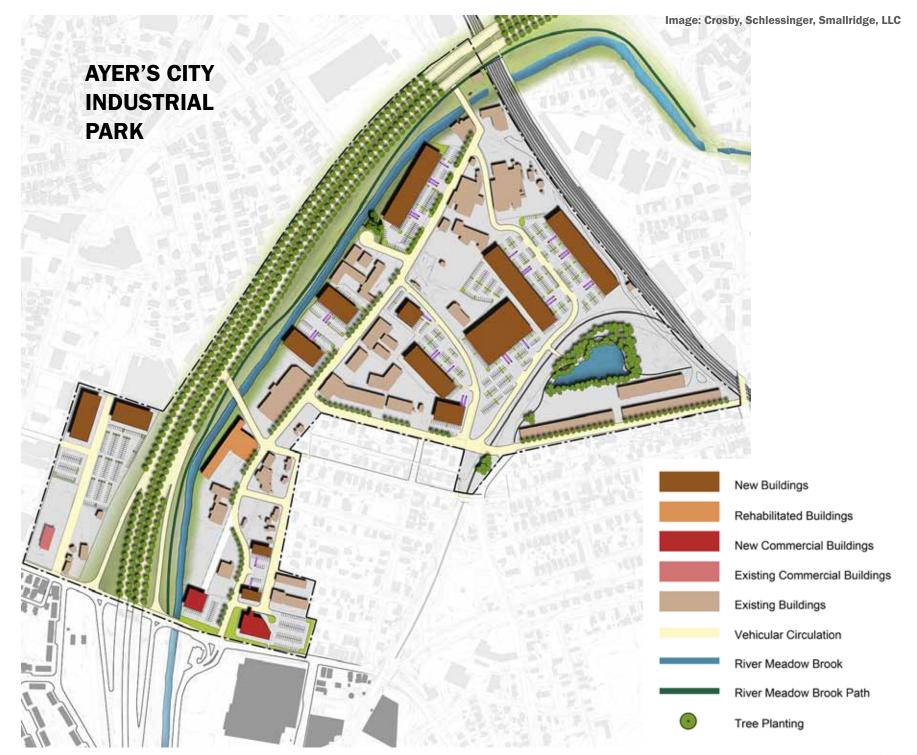


Lowell received a \$175,000 planning grant from the EPA to re-envision the Tanner Street area and identify creative development and redevelopment opportunities.

Photo: DPD

# COMPLETE AND BEGIN IMPLEMENTATION OF THE AYER'S CITY INDUSTRIAL PARK PLAN AS AN URBAN RENEWAL PROJECT DESIGNED TO CREATE ADDITIONAL INDUSTRIAL, COMMERCIAL, AND RETAIL EXPANSION SITES, PROVIDE ADDITIONAL EMPLOYMENT OPPORTUNITIES FOR LOWELL RESIDENTS, AND GROW THE CITY'S TAX BASE.

- Complete the development of an Urban Renewal Plan under the EPA's Area-wide Planning Grant program and obtain local and state approvals for the plan.
- Improve pedestrian and vehicular access to the district from the Lowell Connector, as recommended in the plan.
- Enhance the streetscape along Tanner Street consistent with the profile of a contemporary industrial collector street by improving "curb appeal" and functionality for current and prospective commercial and industrial tenants.
- Work to ensure that new developments in this area are more compatible with neighboring residential areas than historic uses have been.
- Work with private developers, businesses, and landowners to use the tools available to the City to facilitate the identification, assemblage, clean-up, and redevelopment of sites identified in the plan, prioritizing sites where private parties are prepared to follow promptly with actual developments over more speculative ventures, given the limited resources for city implementation. Support efforts to incorporate safe bicycle and pedestrian routes through the district that can provide greater connectivity between surrounding neighborhoods and key destinations including the Gallagher Terminal, Cross Point, Bruce Freeman Rail Trail, while ensuring these routes are not in conflict with planned industrial uses.
- Support connections to natural resources and the development of open spaces in the area, where feasible.



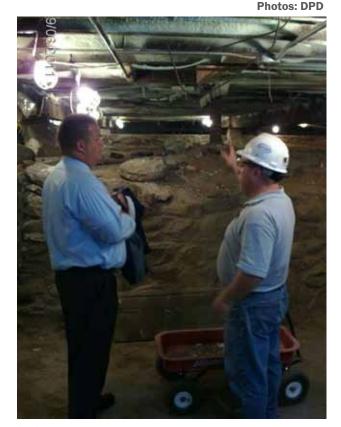
SUSTAINABLE LOWELL 2025 103



**LEED Certified Nobis Engineering Offices** 

**Photo: DPD** 

Below Left: A BetterBuildings energy audit.
Below Right: New boilers are installed at Mass Mills.



## 15 CONTINUE TO EXPAND THE CITY'S CLUSTER STRENGTHS, INCLUDING ITS ENVIRONMENTAL AND ENVIRONMENTALLY-SUSTAINABLE BUSINESSES, INSTITUTIONS, AND INDUSTRY.

- Explore opportunities for district heating and cooling and electricity sharing as ways to reduce costs for new businesses looking to locate in Lowell.
- Retain existing green businesses in Lowell and recruit new businesses to locate within the city, particularly in the environmental engineering, renewable energy, recycling, energy efficiency, and green materials industries.
- Expand workforce training for green industries, working in collaboration with UMass Lowell, Middlesex Community College, and other institutional stakeholders.



Upon completion of the BetterBuildings program, Lowell will have retrofitted more than 1.5 million square feet of commercial and multi-family residential space in historic Downtown buildings. In December, 2012, Lowell's Better Buildings program became the first of its kind to meet its square-footage milestone.

- Encourage the development of credibly greener commercial buildings and operations through established programs like LEED (Leadership in Energy and Environmental Design) certification and Energy Star.
- Support the incorporation of green site design features into industrial and commercial districts and office park areas of the City, and work to market these features as part of an effort to attract more green business tenants to them.
- Encourage the development of partnerships and systems that enable businesses and institutions to share machinery, equipment, and other resources.

- Coordinate institutional research with local and regional policy and community needs.
- Connect "green" businesses and industries to local environmental organizations so as to encourage their mutually beneficial investment in the community.



Team Massachusetts, comprised of members from UMass Lowell and Mass College of Art, earned 9th Place in the U.S. Department of Energy's 2011 Solar Decathlon for the design of their affordable, highly energy-efficient home. **Photo: U.S. Department of Energy** 



**Green job training** 



Recycling of old slate in UTEC's award-winning retrofit, the oldest LEED Platinum building in the country. Photo: UTEC

Photo: MassDOT



**Photo: DPD** 

## REPURPOSE VACANT OR UNDER-UTILIZED SPACES FOR NEW, CREATIVE USES TO ELIMINATE BLIGHT THAT MAY DISCOURAGE INVESTMENT IN SURROUNDING PROPERTIES.

- Work with property owners to program parking lots with outdoor markets, special events, and other community activities on nights and weekends, when there is a decreased demand for their use.
- Transform vacant storefronts into vibrant urban spaces through expansion of the pop-up gallery program, which provides affordable gallery display and performance space to local artists and other entrepreneurs.
- Utilize schools and other under-utilized municipal buildings and spaces for community education and recreational purposes on nights and weekends.
- Improve and repurpose alleyways as vibrant, environmentally-friendly, and active spaces, wherever feasible.
- Continue to redevelop under-utilized and vacant properties in the Acre Urban Revitalization and Development Plan area to create new housing units and commercial space.



Seasonal pop-up stores and galleries can help lower vacancy rates and make streetscapes more lively.

Photo: Atelier Teee

HISTORIC CHARACTER & PRACSET	PUBL QUALTH & VI	CMIC HEATH & ST	CENGACEMENT C SOCIAL C.	RECREAS OMMUNITY COUNTY	MULTIMODE PROPERTY	RESOURCE & IN.	COLLABORY	EDC PARTMERS.	LOCAL EVE FRANCE CHIPS	CONOMIC DEVELORIO	TRAMSPARENT! JOB CREAT	WEARSTE & ACCOUNTAGE	- WIROWNEWIAL WEST	MATURAL RESULT	CARBON CARBON CONSERVE	EMISSION REDU	EFFECTIVE & E. L.	ARTS & CELENT OPER.	SHOPPING NUESIN	LIG & ENTERTAIN.	MITTELL
HEALTHY & SUSTAINABLE LOCAL ECONOMY		_	•	_	_		Æ				<b>?</b>	l .				<b>\$</b>				0	
PRIORITIZE PROGRAMS AND INITIATIVES WITH STRONG PROMISE OF CREATING EMPLOYMENT OPPORTUNITIES FOR LOWELL RESIDENTS, AND STRIVE TO CONTINUE INCREASING EMPLOYMENT RATES IN THE CITY.											•										
INCREASE COMPETITIVENESS OF THE LOCAL WORKFORCE, EXPAND CAREER EDUCATION AND JOB TRAINING TO MATCH WORKFORCE NEEDS, AND PROVIDE PLACEMENT OPPORTUNITIES FOR THE CITY'S RESIDENTS.																					
IMPROVE FOUNDATIONAL EDUCATION TO BETTER PREPARE THE CITY'S YOUTH FOR FUTURE EMPLOYMENT AND PARTICIPATION IN THE LOCAL ECONOMY.																					
CREATE OPPORTUNITIES FOR EXISTING BUSINESSES TO THRIVE, REINVEST IN THE LOCAL ECONOMY, AND BECOME MORE COMPETITIVE IN THE REGIONAL, NATIONAL, AND INTERNATIONAL MARKETPLACE.									•	•		•		•				•			
INCREASE SUPPORT FOR SMALL AND MINORITY-OWNED BUSINESSES.																					
ATTRACT NEW BUSINESSES TO THE CITY BY TARGETING GROWING INDUSTRY SECTORS THAT ALIGN WELL WITH THE GREATER LOWELL REGION'S RESOURCES, WORKFORCE, AND COMPETITIVE ADVANTAGE.																					
CREATE A CULTURE OF INNOVATION AND ENTREPRENEURSHIP.																					
INCREASE CAPACITY OF LOCAL INSTITUTIONS TO BECOME ECONOMIC ENGINES FOR THE COMMUNITY AS A WHOLE.																					

SUSTAINABLE LOWELL 2025 107

HISTORIC CHARACTER & PRESERV	PUBLIC QUALITY & VA.	CING E. RALTH & SAF	MGAGEMENT & SOCIAL EXT	RECREATIVE COMMUNITY P.	MULTIMODAL OPPORTU	TESOURCE & MAL TRAMSPORTAGE	COLLABORATION SHAR	EDUC PARTMERS	LOCAL ECO CATION & TRAIL	ON ONIC DEVELORITOR	ORANSPARENCY OR CREAT	INFRASTRUC OUNTARY	MIRONMENTAL PE	THIRAL RESOUR AMING & POLE	CARBON C. CONSERVA	EMESSION REDUC	CEFFECTIVE & EFF.	ARTS & CULE TOPERAL!	SHOPPING TONS	S. E. ELITERTAMAN	
HEALTHY & SUSTAINABLE LOCAL ECONOMY		6					Ø₹0			4		ŝ	<b>7</b>	W		<b>\$</b>	<b>(3)</b>	•	<b>%</b> 0	0	•
TARGET, ASSESS, AND REMEDIATE BROWNFIELDS FOR REDEVELOPMENT.																					
SUPPORT THE HEALTH SERVICES INDUSTRY TO MAINTAIN HIGH-QUALITY, ACCESSIBLE HEALTH CARE FOR LOWELL RESIDENTS.																					
CONTINUE TO PRIORITIZE SUPPORT FOR THE IMPLEMENTATION OF THE HAMILTON CANAL DISTRICT MASTER PLAN AND LARGER JAM URBAN REVITALIZATION AND DEVELOPMENT PLAN TO CREATE NEW OPPORTUNITIES FOR ECONOMIC DEVELOPMENT IN DOWNTOWN AND SURROUNDING NEIGHBORHOODS.																					
EXPLORE OPPORTUNITIES FOR COMMERCIAL URBAN AGRICULTURAL PRODUCTION AND DISTRIBUTION AS AN ECONOMIC ACTIVITY AS WELL AS A LOCAL FOOD SOURCE.																					
STRENGTHEN AND ENHANCE EXISTING INDUSTRIAL AND COMMERCIAL AREAS AND DEVELOP NEW SITES FOR BUSINESS OPPORTUNITIES.																					
COMPLETE AND BEGIN IMPLEMENTATION OF THE AYER'S CITY INDUSTRIAL PARK PLAN AS AN URBAN RENEWAL PROJECT DESIGNED TO CREATE ADDITIONAL INDUSTRIAL, COMMERCIAL, AND RETAIL EXPANSION SITES, PROVIDE ADDITIONAL EMPLOYMENT OPPORTUNITIES FOR LOWELL RESIDENTS, AND GROW THE CITY'S TAX BASE.																					
CONTINUE TO EXPAND THE CITY'S CLUSTER STRENGTHS, INCLUDING ITS ENVIRONMENTAL AND ENVIRONMENTALLY SUSTAINABLE BUSINESSES, INSTITUTIONS, AND INDUSTRY.																					
REPURPOSE VACANT OR UNDER-UTILIZED SPACES FOR NEW, CREATIVE USES TO ELIMINATE BLIGHT THAT MAY DISCOURAGE INVESTMENT IN SURROUNDING PROPERTIES.																					



owell will strive to bolster its growing reputation as a model for environmentally sustainable practices in an urban setting. It will accomplish this goal by proactively preparing for and adapting to climate change and continuing efforts to reduce its emissions of greenhouse gases so as to mitigate its impact on the environment.

#### **ENVIRONMENTAL RESILIENCE**



**Photo: Marianne Gries** 

SUSTAINABLE LOWELL 2025 109

#### RESILIENCIA AMBIENTAL

Lowell buscará fortalecer su creciente reputación como modelo en cuanto a la implementación de practicas ambientalmente sostenibles en un puesto urbano. Logrará proactivamente su meta preparándose para y adaptándose al cambio climático y continuando sus esfuerzos de reducir las emisiones de gases de efecto invernadero para mitigar su impacto en el medioambiente.



AMBIENTAL

ឡូវ៉ែល្ល នឹងខ្លះខ្មែងពាំទ្រកេរ្តិ៍ឈ្មោះល្អសុះសាយ ជាពំរូសំរាប់ការអនុវត្តន៍ ជាទំលាប់ដែលអាចទ្រទ្រង់បរិស្ថាន នៅក្នុងចំណាត់ថ្នាក់ទីក្រុង។ វានឹង សំរេចគោលដៅនេះ ដោយការចាត់វិធានការទុកជាមុន ហើយសម្រប សម្រួលតាមការផ្លាស់ប្តូរធាតុអាកាស និងការបន្តខិតខំប្រឹងប្រែងកាត់ បន្ទុយការបញ្ចេញជាតិខុស្ម័នពុល ដើម្បីសម្រាលឥទ្ធិពលលើបរិស្ថាន។

Lowell continuará a reforçar a sua reputação crescente como modelo de práticas ambientais sustentáveis num espaço urbano. Este objectivo será atingido através de se preparar e adaptar continuamente às alterações climáticas e continuar os seus esforços em reduzir as emissões de gases de efeito estufa, a fim de minimizar seu impacto sobre o meio ambiente.

#### **OBJECTIVES**

1	The City of Lowell will set an example by prioritizing environmentally sustainable policies and practices.
2	Develop policies and programs that will build upon the successes of reducing solid waste and increasing recycling citywide.
3	Develop programs and policies to reduce the disposal of organic wastes into the waste stream.
4	Improve water quality.
5	Improve air quality and reduce carbon emissions through energy efficiency enhancements and the adoption of alternative fuels.
6	Promote urban forestry as a method for improving public health as well as the physical and built environment.
7	Produce energy from renewable sources.
8	Seek to reduce the adverse impacts and severity of flood events.
9	Prepare proactively for heat waves, droughts, ice storms, and other types of natural disasters so as to mitigate their negative impacts.
<b>10</b>	Educate the public about the importance and urgency of climate change and carbon emission reduction.

SUSTAINABLE LOWELL 2025 111



#### THE CITY OF LOWELL WILL SET AN EXAMPLE BY PRIORITIZING **ENVIRONMENTALLY SUSTAINABLE POLICIES AND PRACTICES.**

Photo: DPD

- Prioritize use of materials made from recycled content for construction and rehabilitation of city buildings and structures, and in procurement of goods and supplies.
- Build upon maintenance practices conducted at Tyler Park and expand an organic lawn care policy to other green spaces in the City, where feasible.
- Develop landscape guidelines that identify native species and ensure appropriate placement and planting standards be employed in all public projects.
- Develop snow plowing and deicing policies for roads, parking lots and pathways to minimize the use of salt and other caustic materials. Strategies may include the development of maps to identify where salt may be used and to help monitor levels of use.

- Maintain Green Community status through the Department of Energy Resources to demonstrate the City's commitment to energy efficiency and renewable energy, as well as to state grants associated with this program.
- Monitor the performance of the recent energy conservation measures implemented under the City's energy services contract, adjusting operations and practices as needed to ensure that anticipated energy reduction targets are met while providing adequate funding and training resources to ensure proper maintenance of equipment and systems.
- Continue requiring all capital building projects assisted with Consolidated Plan funding to be Energy Star certified, LEED (Leadership in Energy and Environmental Design) certifiable, or demonstrate comparable comprehensive environmental sustainability if no independent rating system is available for the specific building type.

## DEVELOP POLICIES AND PROGRAMS THAT WILL BUILD UPON THE SUCCESSES OF REDUCING SOLID WASTE AND INCREASING RECYCLING CITYWIDE.

- Update solid waste and recycling ordinances so as to expand access to and participation in recycling by all residential and commercial properties in the city.
- Expand on recent demonstration drop-off center projects with a permanent facility that allows for regular access to recycling and a convenient means by which to dispose of hazardous materials.
- Explore additional incentives and enforcement tools as well as more comprehensive changes, such as a potential transition to single-stream recycling, in an effort to improve the City's recycling rate.
- Explore potential partnerships with UMass Lowell, MCC and other institutional stakeholders to allow for the integration of waste stream management systems in an effort to reduce their overall waste generation.

- Increase the number of public recycling bins and solar trash compactors available Downtown and near parks, schools, public transportation, and neighborhood business districts, exploring contracts with companies that offer advertiser-funded collection options.
- Implement a recycling program in the schools.
- Expand outreach and education around recycling, composting, and proper waste disposal.
- Improve diversion of reusable materials such as clothing, furnishings, and household goods from municipal solid waste through donation, public drop boxes, institutional reuse, and other codecompliant means.
- Implement diversion and recycling policies for construction and demolition material.



Trash bins in Lowell

Photo: Ben Hill

SUSTAINABLE LOWELL 2025 113

# THE PARTH MACHINE Composting

**Composting bin** 

#### DEVELOP PROGRAMS AND POLICIES TO REDUCE THE DISPOSAL OF ORGANIC WASTES INTO THE WASTE STREAM.

- Prioritize enforcement and implementation of the City's existing ordinance for dog waste.
- Implement a food waste program that works in tandem with the recycling program.
- Support the establishment and expansion of composting programs for schools and other municipal facilities that serve food, restaurants, institutions, commercial cafeterias, and residences citywide.

- Develop a composting program for all organic waste generated while maintaining public parks.
- Process trees that have been cut down and use the wood chips produced in public parks and gardens.
- Encourage generators of waste oils, fats and greases to recycle these products into fuel and link them to businesses which harvest these materials for fuel production.
- Establish an anaerobic digester, a system used to create energy from microorganisms breaking down biodegradable material in the absence of oxygen and process organic waste from households, businesses, and local institutions.
- Encourage local businesses to become certified through the Green Business Program.



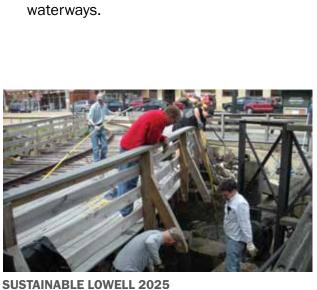
Vermicomposting workshop at the Franklin Court
Community Garden Photo: DPD

114

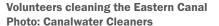
#### **IMPROVE WATER QUALITY.**

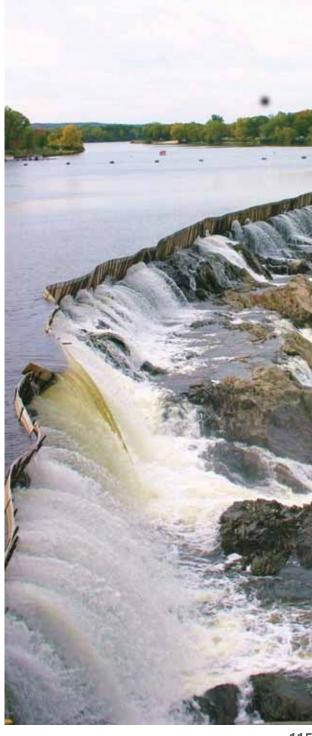
- Continue to support local water quality advocates.
- Identify volunteers to assist with frequent water sample collection and processing.
- Develop and implement an agreement to keep the canals clean.
- Continue to support facility improvements at the Water and Waste Water Department.
- Reduce non-point source pollution for waterways.

- Encourage companies that produce or manage hazardous waste to locate their businesses away from the waterfront so as to discourage the pollution of waterways.
- Monitor and maintain appropriate levels of fluoridation in water supplies to protect the dental health of drinking water consumers.
- Expand public awareness and alternative disposal programs to eliminate pharmaceutical disposal into the wastewater system.



**Pawtucket Falls Dam Photo: Jennifer Myers** 







## IMPROVE AIR QUALITY AND REDUCE CARBON EMISSIONS THROUGH ENERGY EFFICIENCY ENHANCEMENTS AND THE ADOPTION OF ALTERNATIVE FUELS.

- Incorporate the purchase of more electric vehicles in the City vehicle purchasing policy and plan for the placement of charging facilities to support an electric vehicle fleet.
- Install publicly accessible electric vehicle charging stations in places such as public parking garages and public parks, and implement parking incentives for electric vehicles in municipal garages.
- Develop a streamlined permit process to support the installation of home-based electric vehicle charging stations.
- Require licensed taxi companies and operators in Lowell to convert their fleets to fuel-efficient or hybrid vehicles.
- Petition the Massachusetts Department of Public Utilities for a municipal electricity aggregation program, whereby municipalities would combine the purchasing power of individual consumers to secure competitive energy supply contracts to lower the total electricity costs for ratepayers, and utilize the resultant access to ratepayer funds to develop and implement a municipal program for promoting energy efficiency retrofitting of residential and commercial buildings citywide.
- Reduce the carbon emissions from residential, institutional, industrial, and commercial buildings citywide 20% by 2025.
- Support UMass Lowell in their goal of reaching climate neutrality by 2050, and seek to work collaboratively in achieving this goal wherever practical.

Public electric vehicle charging station in Lowell.

## PROMOTE URBAN FORESTRY AS A METHOD FOR IMPROVING PUBLIC HEALTH AS WELL AS THE PHYSICAL AND BUILT ENVIRONMENT.

- Plant a minimum of 3,000 new trees throughout the city by 2025, prioritizing street tree planting, particularly in areas where there is a shortage.
- Conduct a citywide tree inventory, potentially utilizing smartphone applications or similar technologies, and perform regular updates.
- Update the existing tree ordinance and prioritize implementation to ensure that, whenever possible, public trees are replaced when they are removed.

- Improve coordination between city departments on tree planting procedures.
- Ensure that appropriate City officials are properly trained to act as stewards of the City's public trees in a manner consistent with the tree ordinance.
- Promote the partnerships that provide free trees to first-time home buyers.
- Encourage the planting of urban orchards, where appropriate.
- Explore the feasibility of establishing an urban tree farm or nursery.



Seattle plans to build the largest urban food forest in the U.S. SUSTAINABLE LOWELL 2025





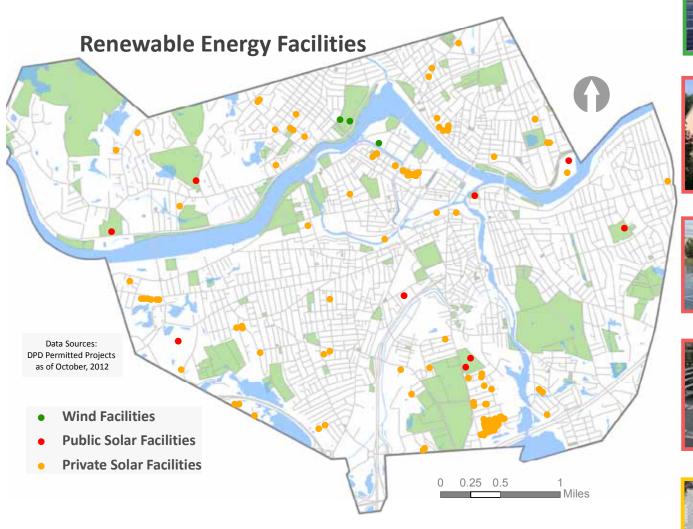


#### PRODUCE ENERGY FROM RENEWABLE SOURCES.

- Identify the impediments to implementation of renewable energy systems on private homes and commercial properties, and seek to address them through education, permit streamlining, and ordinances which properly balance incentives with regulation of potentially harmful impacts.
- Develop brightfields and other large scale renewable energy facilities, particularly in areas that will spur urban revitalization, aid in toxic waste site cleanup, or where environmental conditions limit alternative redevelopment options, including the Westford Street landfill and Silresim Superfund Site.
- Identify and prioritize installation of solar photovoltaic arrays and other renewable energy systems on municipal property, including but not limited to parking garages, schools, and parks.

- Identify and assess opportunities for implementing solar thermal arrays on or near municipal facilities, including public pools or spray parks.
- Improve education and connect interested parties in Lowell to financial incentive programs to encourage deployment of renewable energy facilities.
- Encourage adoption and market transformation of renewable energy technologies.
- Support the continued use of Lowell's historic Downtown canal system for utility-scale hydroelectric power generation, while working to ensure that the owners of these facilities act as responsible stewards and collaborative partners with their neighbors, the City, and other stakeholders.
- Explore use of geothermal, cogeneration, and storage technologies.

Photo: CBA





Wind and Photovoltaics at the Lowell National Historical Park Maintenance Facility



4 public schools including the Butler have added rooftop solar arrays



Lowell Regional Transit Authority Solar Array



Lowell Memorial Auditorium Solar Arays



Many private residential and institutional developments incorporate renewable energy facilities



#### SEEK TO REDUCE THE ADVERSE IMPACTS AND SEVERITY OF FLOOD EVENTS.

- Enforce Conservation Commission conditions and those of other relevant regulatory bodies.
- Ensure compliance with new flood zones as dictated by the Federal Emergency Management Agency (FEMA).
- Ensure that new development that occurs within flood zones adequately mitigates and compensates for any impacts on flood storage and flood control.
- Preserve wetlands throughout the city, and identify areas to expand flood storage.
- Identify repetitive damage areas that have traditionally been susceptible to flooding.
- Adopt and implement a Green Streets Policy that provides guidelines and performance standards for LID practices as part of the Project Review process (use of pervious pavement, rain gardens, etc).

- Develop guidelines for low-impact development (LID) practices, which emphasize conservation and use of onsite natural features to mitigate flooding, and introduce performance standards that prioritize LID as part of the Project Review process.
- Require high standards for maintenance of flood storage systems, so as to ensure that, over time, stormwater continues to be managed on site.
- If permitted by state statute, explore the feasibility of developing a regional stormwater utility.
- Incorporate bio-retention practices into all new municipal parking lots and require these practices in private developments.
- Increase cooperation with surrounding towns and neighboring states to coordinate dam operations, manage flood control activities, and prevent downstream flooding.

Photo: DPD



Photo: DPD

- Educate owners of properties located within flood hazard areas as to proper flood mitigation practices, and notify eligible applicants of available hazard mitigation project grant funding.
- Consider participation in the federal Community Rating System to reduce flood insurance rates in Lowell through the implementation of flood plain management practices in excess of National Flood Insurance Program (NFIP) requirements.
- Develop location-specific strategies for neighborhoods already within the flood zone.
- Identify and seek public and private sector funding for residents and businesses to implement sound hazard mitigation measures.

- Pursue mitigation funding to reduce repetitive losses along Black Brook, Beaver Brook, and Clay Pit Brook.
- Install backflow prevention valves and other mechanisms on Combined Sewer Overflow (CSO) and stormwater outlets at appropriate locations throughout the city to prevent river backflow from inundating roadways, pump stations, and other critical facilities.
- Increase funding for and improve monitoring and maintenance of drainage infrastructure.
- Routinely monitor and repair flood control structures, levees, and canal walls to ensure structural integrity.
- Clean debris from canals and control structures.



FEMA-funded valves & pumps control flooding in Lowell.

Photo: New England Environmental Equipment



A parking lot incorporating bioretention practices
Photo: Montgomery County Planning



Branches dangerously close to power lines.

Photo: Photos o'Randomness

Xeriscaping can conserve precious water during warmer seasons. Photo: DarkSevier



## PREPARE PROACTIVELY FOR HEAT WAVES, DROUGHTS, ICE STORMS, AND OTHER TYPES OF NATURAL DISASTERS SO AS TO MITIGATE THEIR NEGATIVE IMPACTS.

- Participate more actively in the Northern Middlesex Council of Government's (NMCOG) regional Hazard Mitigation Plan development and the updating of the City's local Hazard Mitigation Plan.
- Educate residents so that they will be better prepared to endure periods of utility service disruption caused by natural disasters.
- Identify and publicize local and regional evacuation routes.
- Develop a heat response plan to serve vulnerable populations during a heat wave.



- Develop a water conservation plan to reduce water consumption during periods of drought.
- Identify contingency plans and alternative water sources in the event that the Merrimack River levels are reduced by drought to levels that impact the function and ability of the Lowell Regional Waste Water Utility to meet water demand.
- Conduct an inventory of buildings capable of implementing green roofs, and encourage their construction when such projects will have a meaningful impact.
- Maximize groundwater recharge and on-site retention of stormwater in new developments and significant paving or renovation projects.
- Encourage landscaping practices that minimize irrigation needs, rain barrel usage, and other water conservation measures.
- Develop a mitigation plan for protecting all cultural and historic resources from natural hazard damage.

Photo: JessicaTounzen, USNavy

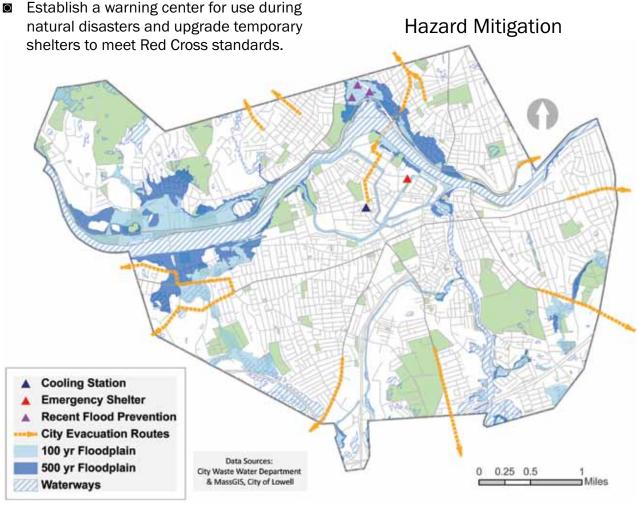


**Lowell Emergency Management Truck** 

Photo: DPD

- Hold meetings and open houses to discuss water conservation opportunities and seek to replicate best practices from other municipalities.
- Inventory, map, relocate, and fortify any critical facilities that would be at risk during natural disasters.
- Replace obsolete snow plow equipment with modern and reliable equipment to increase efficiency and cost-effectiveness of snow operations.
- Identify power lines at risk and trim branches that could potentially drown power lines, leading to prolonged power outages.
- Increase public preparedness regarding the dangers of natural disasters (including, but not limited to frost bite, hypothermia, and drowned power lines) and develop multiple streams of communication during emergencies.
- Enforce state building codes designed to protect structures from high winds, earthquakes, fire, and snow loading.

Identify potential heat island locations.



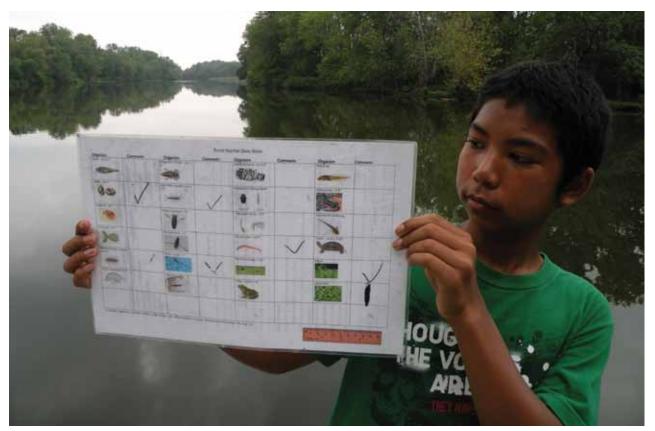


Solar arrays on public schools can serve as educational tools.

#### **Photo: DPD**

#### 10 EDUCATE THE PUBLIC ABOUT THE IMPORTANCE AND URGENCY OF CLIMATE CHANGE, AND CARBON EMISSION REDUCTION.

- Promote awareness of climate change through public events, festivals, community conversations, and other highly visible initiatives.
- Engage students and institutions through educational programs, community service, and service learning opportunities.
- Produce educational films, campaigns and other materials.
- Organize and promote friendly competitions citywide such as Getting to Zero and a One Gallon Challenge which encourage the community to adopt an ethic of sustainability.
- Make climate change and environmental quality data readily available to residents, community partners and other stakeholders through open source software and other engaging means.



HISTORIC CHARACTER & PRESEN	PUBLS QUALITY & VIA	CMC F. HEALTH & SM.	ENGAGEMENT OF SOCIAL EX-	RECREATION TOUTH	MULTI-MODE OPPORTO	RESOURCE & MARCA MANTH	COLLABORANIAMON SHA	EDUC PARTIMERS.	LOCAL ECO. THOM & TRAIL	OMOMIC DEVELORITION	TO ANSPARENCY JOB CREAT	INFRASTRUC SHOCOUNTABLE	WIROMMENTAL Y	ATURAL RESOURCE & PULL	CARBON E. CONSERVICE	EMESION REDUC	EFFECTIVE & EFF	ARTS & CULL OPERA.	SHOPPING TOMS	G & EMTERIALINI	
ENVIRONMENTAL RESILENCE		6					Æ			4		\$	<b>3</b>	W		<b>\$</b>	1	8	l .		•
THE CITY OF LOWELL WILL SET AN EXAMPLE BY PRIORITIZING ENVIRONMENTALLY SUSTAINABLE POLICIES AND PRACTICES.																					
DEVELOP POLICIES AND PROGRAMS THAT WILL BUILD UPON THE SUCCESSES OF REDUCING SOLID WASTE AND INCREASING RECYCLING CITYWIDE.																					
DEVELOP PROGRAMS AND POLICIES TO REDUCE THE DISPOSAL OF ORGANIC WASTES INTO THE WASTE STREAM.																					
IMPROVE WATER QUALITY.																					
IMPROVE AIR QUALITY AND REDUCE CARBON EMISSIONS THROUGH ENERGY OF EFFICIENCY ENHANCEMENTS AND THE ADOPTION OF ALTERNATIVE FUELS.																					
PROMOTE URBAN FORESTRY AS A METHOD FOR IMPROVING PUBLIC HEALTH AS WELL AS THE PHYSICAL AND BUILT ENVIRONMENT.																					
PRODUCE ENERGY FROM RENEWABLE SOURCES.																					
SEEK TO REDUCE THE ADVERSE IMPACTS AND SEVERITY OF FLOOD EVENTS.																					
PREPARE PROACTIVELY FOR HEAT WAVES, DROUGHTS, ICE STORMS, AND OTHER TYPES OF NATURAL DISASTERS SO AS TO MITIGATE THEIR NEGATIVE IMPACTS.																					
EDUCATE THE PUBLIC ABOOUT THE IMPORTANCE AND URGENCY OF CLIMATE CHANGE AND CARBON EMISSION REDUCTION.																					

## EFFECTIVE OPERATIONS, INFRASTRUCTURE AND TECHNOLOGY



The City will seek to increase its fiscal and operational sustainability by improving the efficiency and effectiveness of municipal services. To achieve this goal, Lowell will prioritize data-driven practices, support revenuegenerating activities within departments, regionalize appropriate services, eliminate wasteful activities. upgrade critical facilities and infrastructure, invest in technological enhancements, improve interdepartmental communication, and maintain a talented and professional workforce.

Photo: Ameresco

#### OPERACIONES, INFRAESTRUCTURA Y TECNOLOGÍA EFECTIVAS

La Ciudad buscará mejorar su sostenibilidad fiscal y operativa mediante el mejoramiento de la eficaces y la eficiencia de los servicios municipales. Para lograr dicha meta, Lowell priorizará procesos determinados por la información y apoyará actividades que generen ingresos dentro de los departamentos, regionalizará servicios apropiados, eliminará actividades desperdiciadoras, actualizará instalaciones e infraestructura crítica, invertirá en fortalecimientos técnicos, mejorará comunicación Inter-departamental, y mantendrá una fuerza laboral talentosa y profesional.

## ម្រតិបត្តិភារ, មេរដ្ឋារចនាសម្ព័ន្ធ, មម្ដេកនេសដែល មានប្រសិន្ធភាពសមរម្យ

សាលាក្រុងនឹងស្វះស្វែងបង្កើនភាពដែលអាចទ្រទ្រង់បានផ្នែកសារពើពន្ន និងកិច្ចប្រតិបត្តិការណ៍ ដោយមានភាពផ្តល់នូវផលល្អ និងប្រសិទ្ធិភាពនៃ សេវាកម្មក្រុងកាន់តែប្រសើរឡើង។ ដើម្បីសំរេចគោលដៅនេះ, ឡូដែល្ជ នឹងធ្វើអាទិភាពការអនុវត្តន៍ជាទម្លាប់បង្កើតក្បួនទិន្នន័យ, ឧបត្ថម្ភសកម្ម ភាពធ្វើឲ្យមានប្រាក់ចំណូលនៅក្នុងផ្នែកផ្សេងៗ, រៀបចំសេវាកម្មសម ស្របតាមតំបន់, បំបាត់ចោលសកម្មភាពដែលឥតប្រយោជន៍, ធ្វើឲ្យទី កន្លែងសំខាន់ផ្សេងៗនិងហេដ្ឋារចនាសម្ព័ន្ធទាន់សម័យ, ធ្វើវិនិយោគ ផ្នែកបច្ចេកទេសឲ្យប្រសើរឡើង, ធ្វើឲ្យការប្រាស្រ័យទាក់អន្តរក្រសួង កាន់តែប្រសើរឡើង, និងរក្សាថាមពលពលកម្មដែលប៉ិនប្រសប់ ហើយ ដែលមានទេពកោសល្បឲ្យបានស្ថិតស្ថេរ។

# OPERAÇÕES EFICAZES, INFRA-ESTRUTURA E TECNOLOGIA

A cidade vai procurar aumentar sua sustentabilidade fiscal e operacional, melhorando a eficiência e a eficácia dos seus serviços municipais. Para atingir este objetivo, Lowell vai priorizar práticas orientadas por base de análise de dados, apoiar actividades geradoras de receitas, regionalizar serviços apropriados, eliminar seviços inúteis, atualizar a sua infra-estrutura nos sectores críticos, investir em progressos tecnológicos, melhorar a comunicação inter-departamental e manter uma força de trabalho com talento e profissionalismo.

#### **OBJECTIVES**

1	Recruit and maintain a talented, professional, and well-trained workforce.
2 3	Ensure the health, safety and welfare of those who live in, work in, or visit the city.
3	Seek to regionalize and consolidate services where practical.
4	Evaluate, maintain and improve communication tools and infrastructure.
5	Continually monitor operations using data-driven practices, recommending and implementing efficiency measures as appropriate.
6	Increase the efficiency of city operations while providing quality public services.
7	Continue to find ways to make Lowell's existing infrastructure more sustainable.
8	Ensure that Lowell's public buildings and infrastructure meet current needs and standards and are properly maintained to preserve their functionality and value to the City.
9	Ensure implementation of responsible and sustainable fiscal policies.
10	Reduce energy costs.

#### RECRUIT AND MAINTAIN A TALENTED, PROFESSIONAL, AND WELL-TRAINED WORKFORCE.



Photo: DPD

- Make municipal hiring decisions based on applicants' qualifications, experience, education, interests, and talents.
- Provide appropriate skill training for relevant city employees, such as safety training for public works and clerical employees, and customer-service training to all front-line employees.
- Provide cultural competency trainings to city staff.
- Continue to provide and support professional development opportunities for existing staff.

- Evaluate and make adjustments to benefit packages as deemed appropriate, so as to recruit and retain the most qualified, committed and healthy workforce possible.
- Ensure that employee compensation is competitive with market conditions for similar positions in other communities.
- Prioritize the hiring of Lowell residents and encourage non-resident employees to move to Lowell, but avoid strict residency requirements that will reduce the pool of available talent.



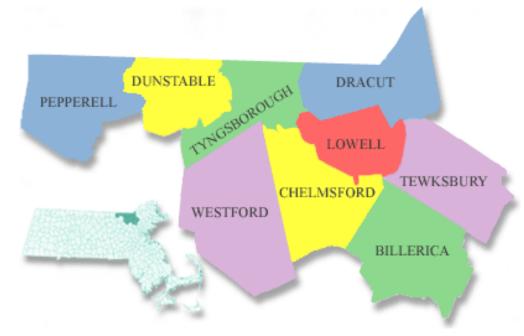
Lowell Senior Center Photo: DPD

#### 2 ENSURE THE HEALTH, SAFETY AND WELFARE OF THOSE WHO LIVE IN, WORK IN, OR VISIT THE CITY.

- Protect people and property throughout the city by developing public health campaigns and bolstering communitybased problem solving practices.
- Respond to crime in a fair, expeditious and innovative manner.
- Provide services that enhance the well-being of our seniors, youth, and other populations that tend to be most vulnerable.
- Support adequate funding of state, federal, and non-profit programs that promote the health, safety and welfare of Lowell residents.

#### 3 SEEK TO REGIONALIZE AND CONSOLIDATE SERVICES WHERE PRACTICAL.

- Explore the implementation of a locally or regionally owned electrical utility.
- Explore the feasibility of a regional 911 dispatch system, emergency center, and public safety team.
- Explore coordination among regional municipal public works departments and related infrastructure.
- Continue the successful regional program for sealing weights and measures.
- Explore strategic regionalization of educational programs to allow students in various districts to take advantage of the unique strengths and offerings of participating schools and capture efficiencies in special education service delivery.
- Ensure that regional implementation efforts align with objectives laid out in the Northern Middlesex Council of Government's (NMCOG) regional strategic plans.



Explore the establishment of a joint Fire Wise Program with other communities in the region.

Explore the feasibility of integrating various City commissions concerned with healthy living and environmental sustainability under a single umbrella, so as to increase communication and output amongst the membership and ensure alignment with the Sustainability Plan. Image: NMCOG



Finland has mandated that all of its residents will have access to 100 Mbps broasband by 2015

Photo: AravinoSivaraj

#### **EVALUATE, MAINTAIN AND IMPROVE COMMUNICATION TOOLS AND INFRASTRUCTURE.**

- Develop a strategic plan for technology and information systems, ensuring that staff are sufficiently trained to implement it.
- Complete and disseminate a technology policy manual.
- Upgrade to a new version of MUNIS and continue efforts to integrate more departments and municipal functions into the MUNIS system.
- Integrate department websites under a single City of Lowell website.
- Ensure that existing communications infrastructure is properly maintained and utilized.
- Upgrade computers, software, telephones, and other communications infrastructure to modernize operations and increase efficiency, where appropriate.
- Ensure sufficient and affordable broadband cellular and internet service coverage throughout Lowell and the region.
- Explore the feasibility of providing free public Wi-Fi access, identify priority locations, and install relevant systems to provide this service to the community.



Photo: inhabitat

## CONTINUALLY MONITOR OPERATIONS USING DATA-DRIVEN PRACTICES, RECOMMENDING AND IMPLEMENTING EFFICIENCY MEASURES AS APPROPRIATE.

- Encourage all departments to develop metrics and track relevant data on an annual basis so as to measure progress made on the City's strategic goals and objectives.
- Provide MUNIS training to appropriate employees in all city departments using a universal data management system.
- Expand the LowellStat program and publicize its findings and analyses to help instill a culture of data-driven management and decision-making in all departments.
- Incorporate all DPD permit functions into MUNIS and continue to improve efficiency of DPD's one-stop shop permitting center.

- Expand the City's capacity and use of GIS tools in the collection, visualization and analysis of data. Where appropriate, explore supplementing in-house resources through potential partnerships with UMass Lowell and other institutional stakeholders.
- Assess equity impacts as part of the annual budget cycle, and report how expenditures, levels of service, and other infrastructure conditions vary by neighborhood, ethnicity, and other demographic categories.
- Develop data-sharing agreements with regional municipalities to inform policy and better serve community stakeholders.



Many mapping tools now have interactive capabilities, enabling users to visualize and manipulate data.

**Image: UMass Lowell** 



GIS Day provides an international forum for users of geographic information systems (GIS) technology to demonstrate real-world applications that are making a difference in our society.

Photo: U.S. Army Corps of Engineers



**Photo: DPD** 



**Central Street Repair** 

Photo: DPD



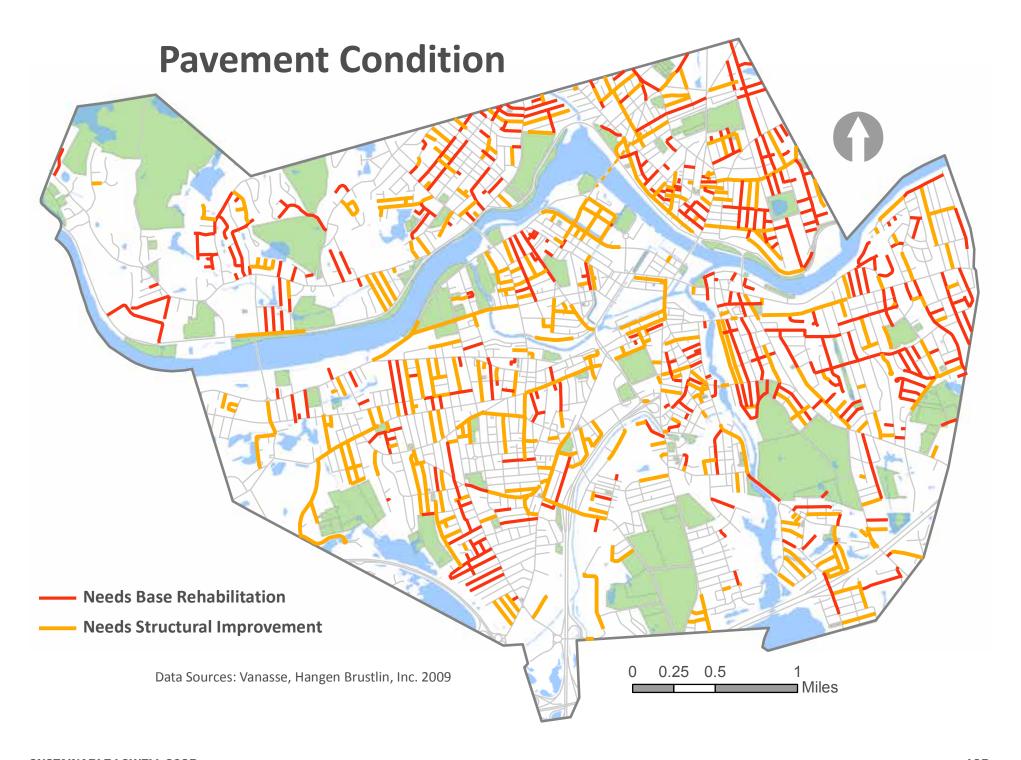
**Parking Enforcement** 

Photo: DPD

#### INCREASE THE EFFICIENCY OF CITY OPERATIONS WHILE PROVIDING QUALITY PUBLIC SERVICES.

- Seek to consolidate and digitize municipal services and functions, where practical.
- Evaluate and implement improvements that allow residents and visitors to perform their City business online.
- Incorporate names and corresponding photographs of all appropriate staff into the City's online directory so to expedite the process by which residents may identify the appropriate contact person for their needs while familiarizing the public with the workforce that is there to serve them.
- Ensure effective and efficient project review, permitting, and code enforcement efforts through interdepartmental collaboration and service delivery.

- Consolidate city and school functions and operations where it may result in reduced costs to municipal taxpayers and the elimination of unnecessary redundancies.
- Conduct departmental staffing studies on a routine basis to evaluate the functionality of their structures and plan for future adjustments, as needed.
- Improve internal communication amongst city departments and staff to ensure that the most accurate and timely information is communicated to the public, and employees are performing their duties in the most effective ways possible.



#### CONTINUE TO FIND WAYS TO MAKE LOWELL'S EXISTING INFRASTRUCTURE MORE SUSTAINABLE.

- Adopt a comprehensive environmental management strategy for all city facilities.
- Ensure proper maintenance of all systems and equipment installed under the energy services performance contract, a financing mechanism designed to accelerate capital investment in cost effective energy conservation measures whereby energy cost savings offsets debt service costs and minimizes or eliminates the net expense of the capital investment.
- Continue to identify and implement improvements to municipal facilities that will result in improved energy efficiency and reduced consumption of water and other resources.
- Build on the nationally recognized model set by the Lowell Wastewater Treatment Plant and continue to incorporate sustainable design upgrades into their facility.
- Complete stormwater upgrade plans.
- Encourage private developers to assist in the on-going maintenance of alternative transportation and other sustainable infrastructure which provides value to their properties.

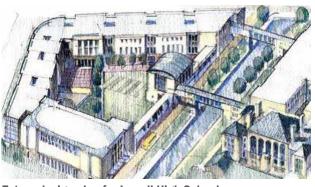


**Green Roof on Lowell Waste Water Treatment Facility** Image: DPW

# 8 ENSURE THAT LOWELL'S PUBLIC BUILDINGS AND INFRASTRUCTURE MEET CURRENT NEEDS AND STANDARDS AND ARE PROPERLY MAINTAINED TO PRESERVE THEIR FUNCTIONALITY AND VALUE TO THE CITY.

- Strengthen the City's annual capital planning process to include more comprehensive capital needs and space planning to complement the project-based financing plans that have been developed in recent years.
- Implement the City's Capital Plan consistently and efficiently.
- Develop a program to more effectively monitor and fund preventative building maintenance at schools and other public buildings thereby reducing exposure to more significant replacement and repair costs in the future.
- Develop and implement a plan for comprehensive improvements to Lowell High School's physical plant.

- Develop and implement a plan for improving the central police and fire station facilities.
- Conduct a comprehensive assessment of municipal office requirements and existing facilities and identify opportunities for greater cost and space efficiencies as well as beneficial adjacencies and collocation.
- Continue to monitor utility, transportation, and other infrastructure conditions to prioritize, finance, and implement a regular program of capital improvements City-wide based on need, condition, and use levels.



Future design plan for Lowell High School.
Image: Downtown Evolution Plan

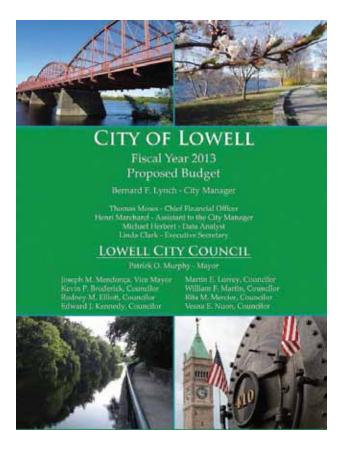


Gorham Street Firehouse. Photo: Lowell Fire Department



Infrastructure investments at the Morey School.

Photo: DPD



#### 9 ENSURE IMPLEMENTATION OF RESPONSIBLE AND SUSTAINABLE FISCAL POLICIES.

- Continue to ensure transparency, participation, and cooperation in financial processes by providing financial information to the City Council and general public in an informative and easily understood manner, as has been achieved through recent budgeting processes.
- Continue to enhance the format of the performance-based budget, which links documentation of goals, objectives, and quantifiable results to financial expenditure planning.
- Continue to improve free cash, stabilization fund, and excess levy capacity levels in order to provide financial flexibility.
- Continue to routinely evaluate fee policies for services, ensuring that they accurately cover service costs with appropriate subsidies.
- Continue to expand local preference and environmentally-friendly purchasing policies to the extent allowable under state procurement laws.

- Invest in local banks and credit unions as a way to spur economic development within the city and support the local economy to the extent that such investments are consistent with the City's financial interests and fiscal policies.
- Strive to maintain the City's fair share of state and federal entitlement allotments and other funds through careful monitoring of demographics and other data.
- Prioritize economic self-sufficiency at the departmental level, where feasible, by continuing to support departments already contributing to the enterprise fund, and encouraging other departments to engage in revenue-generating activities.
- Strive to involve interdepartmental committees in the development and update processes of major municipal documents and plans, such as the Annual Budget, Strategic Goals, Comprehensive Master Plan, and Capital and Maintenance plans to ensure consistency throughout each.

#### **10** REDUCE ENERGY COSTS.

- Support the upgrading of the power grid infrastructure.
- Become an Energy Aggregator under Mass. General Law by serving as a bulk purchaser of energy, reducing costs to all users across the city.
- Utilizing Mass Energy efficiency trust funds, implement a comprehensive and aggressive energy efficiency program for commercial and residential energy users.
- Identify and explore opportunities for distributed power, such as co-generation and district heating.

- Employ a peak load demand management strategy.
- Support municipal aggregation and the development of local programming for energy efficiency to improve access to and participation in this programming among Lowell ratepayers.
- Prioritize use of energy efficient lighting throughout the city, through the development and implementation of an LED streetlight conversion plan, the replacement of holiday lights and decorations with LED bulbs, and other similar means.

The City of Lowell is replacing City Hall windows with new energy efficient ones. Photo: DPD



The City of Lowell invested \$21.1 million in a performance contract to upgrade 47 public buildings with energy efficient and renewable energy features. Photo: DPD



Lowell has converted its traffic lights and many street lights to LEDs and is now exploring converting its other street lights. Photo: DPD

HISTORIC CHARACTER & PRESERV	PUBLIC QUALTIV & MATION	CMIC E. C. HEALTH & S.A.	CHCAGEMENT & SOCIAL EXC	RECREATI. COMMUNITY F.	MULTHMODE TOWAL OPPORTO	OF SOURCE & MY TRANSPORTE	COLLABORANTION SHA	EDUC PARTMERS	LOCALEGO BARAILES	ONOMIC DEVELO	TRANSPARENCY JOB CREAT	INFRASTRU S ACCOUNTABLE	MIROMMENTAL TOTURE INVESTME	LATURAL RESOUR	CARBON E. CONSERVA	EMISSION REDUC			SHOPPING MUESING	AG & EMITERIALIME	ATHE
EFFECTIVE OPERATIONS, INFRASTRUCTURE AND TECHNOLOGY		6	$\odot$				Æ	Ø₹0		4		Ŝ	3	W		<b>₹</b>	7	8	್ಯಂ	0	
RECRUIT AND MAINTAIN A TALENTED, PROFESSIONAL, AND WELL-TRAINED WORKFORCE.									•	•											
ENSURE THE HEALTH, SAFETY AND WELFARE OF THOSE WHO LIVE IN, WORK IN, OR VISIT THE CITY.																					
SEEK TO REGIONALIZE AND CONSOLIDATE SERVICES WHERE PRACTICAL.																					
EVALUATE, MAINTAIN AND IMPROVE COMMUNICATION TOOLS AND INFRASTRUCTURE.																					
CONTINUALLY MONITOR OPERATIONS USING DATA-DRIVEN PRACTICES, RECOMMENDING AND IMPLEMENTING EFFICIENCY MEASURES AS APPROPRIATE.																					
INCREASE THE EFFICIENCY OF CITY OPERATIONS WHILE PROVIDING QUALITY PUBLIC SERVICES.																					
CONTINUE TO FIND WAYS TO MAKE LOWELL'S EXISTING INFRASTRUCTURE MORE SUSTAINABLE.																					
ENSURE THAT LOWELL'S PUBLIC BUILDINGS AND INFRASTRUCTURE MEET CURRENT NEEDS AND STANDARDS AND ARE PROPERLY MAINTAINED TO PRESERVE THEIR FUNCTIONALITY AND VALUE TO THE CITY.										•											
ENSURE IMPLEMENTATION OF RESPONSIBLE AND SUSTAINABLE FISCAL POLICIES.																					
REDUCE ENERGY COSTS.																					

## SUSTAINED PUBLIC ENGAGEMENT



ecause an engaged and informed citizenry is fundamental to a healthy and economically vital community, the City will seek to create and sustain a culture of civic engagement by building community pride and public trust; welcoming the open exchange of ideas; planning for the future in inclusive, transparent, and innovative ways; valuing each community member's unique strengths, expertise, and insight; and cultivating diverse leadership, particularly among youth and the next generation of Lowell's leaders.

**Photo: Adrien Bisson** 

#### PARTICIPACIÓN CÍVICA CONSTANTE



ENGAJAMENTO PÚBLICO SUSTENTADO

Ya que una ciudadanía informada y participativa es fundamental en las comunidades saludables y económicamente, la Ciudad buscará crear y sostener una cultura de participación cívica a través de la fomentación del orgullo comunitario y la confianza pública; planificará para el futuro usando modos inclusivos, transparentes e innovadores, y valdrá las fortalezas, la pericia y las perspectivas de cada miembro de la comunidad. Cultivará un liderazgo diverso, sobre todo entre los(as) jóvenes y la próxima generación de lideres de Lowell.

ព្រោះការចូលរួម និងផ្តល់ពត៌មានរបស់ប្រជាពលរដ្ឋ ជាមូលដ្ឋានគ្រឹះ ល់សហគមន៍ដែលធ្វើឲ្យមានសុខភាពល្អនិងមានភាពរស់រជិកផ្នែក សដ្ឋកិច្ច, សាលាក្រុងនឹងស្វះស្វែងបង្កើតនិងគាំទ្រវប្បធម៌នៃការចូលរួម ចូការនិតិរដ្ឋ ដោយការស្ថាបនាមោទនភាពសហគមន៍ និងទំនុកចិត្ត សាធារណៈ, គម្រោងការសំរាប់អនាគត ក្នុងរប្បើបដែលរាប់បញ្ចូល, ដែលមានតម្លាភាព, និងដែលមានការផ្លាស់ប្តូរ, ឲ្យតម្លៃភាពរឹងមាំ, រំនាញការ, និងប្រាជ្ញាវាងដែរបស់សមាជិកសហគមន៍និមួយៗ, ហើយ រួយជ្រោមជ្រែងឲ្យមានភាពជាមេដឹកនាំផ្សេងៗគ្នា, ជាពិសេសក្នុង រំណោមយុវវ័យ និងអ្នកជំនាន់ក្រោយនៃអ្នកដឹកនាំរបស់ក្រុងឡូដែល្អ។ Porque uma cidadania participativa e informada é fundamental para uma comunidade saudável e economicamente vital, a cidade vai procurar criar e sustentar uma cultura de participação cívica, promovendo orgulho comunitário e e confiança pública, planeando o futuro de forma inclusiva, transparente e inovadora, valorizando as qualidades de cada membro da comunidade e cultivando uma liderança diversificada, particularmente entre jovens e a próxima geração de líderes de Lowell.

#### **OBJECTIVES**

- Strengthen community pride and build public trust by ensuring that pertinent information and success stories are widely communicated, and resident comments and observations are welcomed.
   Continue to make strides towards more inclusive and transparent decision-making practices.
- Make planning and public engagement fun and enjoyable, whenever possible.
- Diversify existing leadership.
- Cultivate the next generation of local leaders by encouraging the sustained engagement of youth in civic life.

# STRENGTHEN COMMUNITY PRIDE AND BUILD PUBLIC TRUST BY ENSURING THAT PERTINENT INFORMATION AND SUCCESS STORIES ARE WIDELY COMMUNICATED AND RESIDENT COMMENTS AND OBSERVATIONS ARE WELCOMED.

- Continue to collect "good news" stories from city departments and disseminate this information to the public, while also promptly responding to and addressing any negative news associated with municipal government operations and activities.
- Continue to air public meetings online through Lowell Telecommunications Corporation and expand coverage to a greater number of meetings and events.
- Continue to disseminate service updates and other pertinent information through a variety of means, including newer technologies and social media, so as to reach the broadest population possible and expand beyond more traditional media sources.

144

- Identify and implement initiatives that encourage crowd-sourced information sharing and improve the city's website as an interactive information portal, such as further development of the existing online community calendar.
- Increase communication and collaboration with schools and other community partners, and cross-promote information when relevant.
- Ensure that implementation efforts associated with Lowell's Sustainability Plan and other major planning initiatives are communicated to and recognized by the community at large.
- Expand the functionality of tools such as See Click Fix and E-Gov, which allow residents to request services or report issues online.



**Photo: Adrien Bisson** 



#### 2 CONTINUE TO MAKE STRIDES TOWARDS MORE INCLUSIVE AND TRANSPARENT DECISION-MAKING PRACTICES.

- Identify barriers to community participation and develop strategies to eliminate them, such as increasing usage of the city's translation equipment at public meetings, translating information regarding events and services into multiple languages, and making provision for childcare at meetings to accommodate families.
- Provide multiple means by which community stakeholders may participate in decision-making processes so that those unable to attend a public meeting may still voice their opinion.
- Leverage the skills, expertise, and relationships built by private and public partners so as to better reach constituents.
- Account for differences in experience, religion, culture, and belief system when designing programs, conducting public outreach, hosting events, and determining policy.
- Strive to strengthen abutter notification efforts.

- Ensure that municipal operations and civic processes are accessible to and easily understood by all through the continued development of educational tools, such as the 'Keys to the City' Film Series, and "How To" Guides to educate residents, business owners, developers, and other community members about how they might perform functions such as establishing a neighborhood association, applying for a vendor permit, or registering to vote.
- Offer trainings for community members on civic issues of interest or concern, such as the functions of various departments or the City Council, so as to encourage lifelong civic engagement.
- Utilize available public and private spaces, such as storefront windows and lobbies, to display information about planning projects and related initiatives, and to solicit community input where appropriate.
- Actively engage all generations in respectful, thoughtful, and welcoming ways so that everyone feels a personal sense of agency as a civically active member of the community.

**Photo: Adrien Bisson** 

#### MAKE PLANNING AND PUBLIC ENGAGEMENT FUN AND ENJOYABLE, WHENEVER POSSIBLE.

- Continue to utilize and further explore the use of friendly, crowd-sourced competitions, such as the Sustainability Snapshots Contest, which leverage community expertise and resources.
- Partner with the Cultural Organization of Lowell (COOL) to utilize the COOL Bus as a mobile meeting space or discussion board during public planning processes.
- Host brown bag lunch discussions that bring community members together around relevant, pressing topics, and encourage innovative, community-driven solutions.
- Explore and encourage the integration of creativity, social justice and public engagement into civic processes, wherever possible.



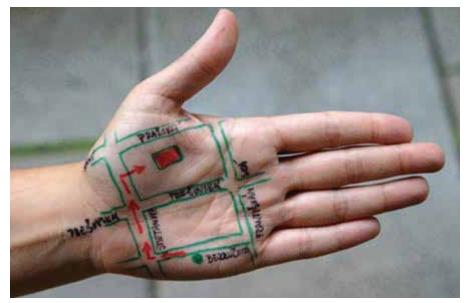
Photo: Lianna Kushi

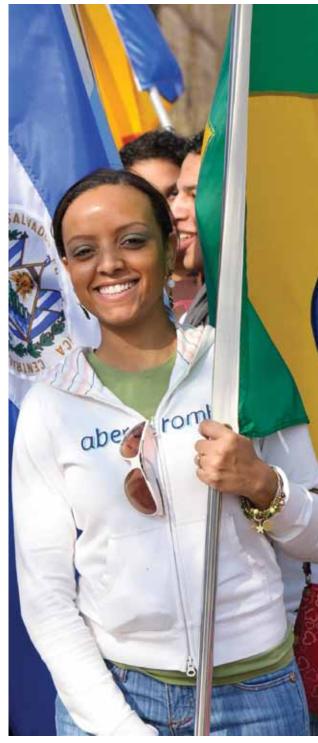
**Photo: Yumi Roth** 



LCHC teens use participatory planning tool, Community PlanIt.

Photo: DPD





#### DIVERSIFY EXISTING LEADERSHIP.

- Recruit, train and appoint minorities who are representative of the city's population to boards and commissions.
- Demonstrate progress in the hiring and retention of a diverse and multilingual workforce so as to serve as role models for future leaders and better communicate with non-English speaking residents.
- Encourage local organizations, businesses and institutions to actively recruit new and diverse board membership and staff on a routine basis to allow for new leadership and fresh ideas.
- Encourage diversity amongst positions of elected leadership through increased outreach, the translation of election materials, and other means to increase rates of voter participation.

## 5 CULTIVATE THE NEXT GENERATION OF LOCAL LEADERS BY ENCOURAGING THE SUSTAINED ENGAGEMENT OF YOUTH IN CIVIC LIFE.

- Support local organizations that provide services and programming for youth empowerment.
- Encourage youth participation in policymaking through involvement with the Lowell Youth Council and other appropriate advisory boards.
- Support the reintegration of civics into the school curriculum.

- Support youth mentorship programs citywide to ensure that Lowell's young people gain the experience and skills necessary to be future leaders of the city.
- Educate youth about their city's history to ensure they appreciate the work that has been done before them and can make the most informed decisions possible in the future.



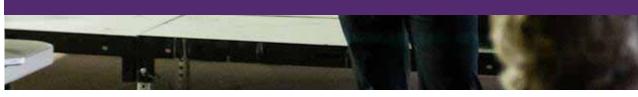
**Photo: UTEC** 

HISTORIC CHARACTER & PRESENT	PUBL QUALTY & VI	CMIC HEALTH & ST.	CENGAGEMENT C SOCIAL E	RECREES: COMMUNITY	MULTIMODE PRIOR	RESOURCE & IN.	COLLABORIES	EDU PARTNERS	LOCAL EV.	COMOMIC DEVELORATION	TRANSPARENT! JOB CRES	INFRASTRIC LINITAS	MIROMMENTAL MUES!	METURAL RESOUR	CARBON CARCE CONSERVE	EMISSION REDUC	EFFECTIVE & ET.	ARTS & CO.	SHOPPING MISSING	AG & EMTERTAIN.	MENT
SUSTAINED PUBLIC ENGAGEMENT	_	_	•	_						4	<b>?</b>	Ŝ	<b>7</b>	W					%	0	•
STRENGTHEN COMMUNITY PRIDE AND BUILD PUBLIC TRUST BY ENSURING THAT PERTINENT INFORMATION AND SUCCESS STORIES ARE WIDELY COMMUNICATED, AND RESIDENT COMMENTS AND OBSERVATIONS ARE WELCOMED.										•											
CONTINUE TO MAKE STRIDES TOWARDS MORE INCLUSIVE AND TRANSPARENT DECISION-MAKING PRACTICES.																					
MAKE PLANNING AND PUBLIC ENGAGEMENT FUN AND ENJOYABLE, WHENEVER POSSIBLE.																					
DIVERSIFY EXISTING LEADERSHIP.																					
CULTIVATE THE NEXT GENERATION OF LOCAL LEADERS BY ENCOURAGING THE SUSTAINED ENGAGEMENT OF YOUTH IN CIVIC LIFE.																					



uccessful implementation of any long-range plan requires investment by both public and private entities within a community, including city departments, elected officials, businesses, schools, neighborhood organizations, and many others. While the City intends to take the lead in implementing the ambitious vision laid out herein, and facilitate the partnerships necessary to ensure that its goals are achieved, it hopes that the work of building a sustainable future for Lowell will be largely collaborative in nature. The following pages present a plan for how various entities throughout the City may best contribute to the implementation process.

### PLAN IMPLEMENTATION



**Photo: Adrien Bisson** 

#### **IMPLEMENTACIÓN**

Una implementación exitosa de cualquier plan de largo plazo requiere una inversión de entidades públicas y privadas dentro de una comunidad, incluyendo los departamentos de la ciudad, oficiales electos(as), negocios, escuelas, asociaciones de vecinos(as), y muchas más. Mientras la Ciudad pretende asumir el liderazgo para emprender e implementar la visión acá escrita, y facilitar las asociaciones necesarias para asegurar que las metas se logren, se espera que el trabajo de construir un futuro sostenible para Lowell será de una naturaleza colaborativa. Las siguientes páginas presentan un plan de cómo varias entidades en toda la ciudad pueden mejor contribuir a la implementación del proceso.



ការអនុវត្តន៍សំដេចជោជជ័យនៃជម្រោងការទៅអនាជជើងផ្លាយណាមួយ ដែលជម្រូវការការវិនិយោជ ដោយមានទាំងអង្គភាពសាធារណៈ និងឯក ជននៅក្នុងសហគមន៍, រួមទាំងផ្នែកផ្សេងៗរបស់សាលាក្រុង, មន្ត្រីផ្លូវការ ពាណិជ្ជកម្ម, សាលាជ្យន, អង្គការប្រចាំសង្កាជ់រស់នៅ, និង អ្នកផ្សេងៗ ទ្យេត។ ខណៈពេលដែលសាលាក្រុងមានបំណងដឹកនាំក្នុងការអនុវត្តន៍ ចក្ខុវិស័យដែលប្រាថ្នាដ៏លើសលុប ដែលមានជ្រោងការណ៍នៅទីនេះ, ហើយជួយសំរួលភាពជាដៃគូរដែលចាំបាច់ ដើម្បីធានាថា ត្រូវសំជច គោលដៅ, សង្ឃឹមថាកិច្ចការនៃការស្ថាបនាអនាជជយអាចទ្រទ្រង់បាន សំរាប់ឡូដែល្អ នឹងត្រូវមានលក្ខណៈសហការយ៉ាងច្រើន។ ទំព័រខាង ក្រោមនេះបង្ហាញពីជម្រោងការ ថាតើអង្គភាពផ្សេងៗពាស់ពេញទីក្រុង

#### **IMPLEMENTAÇÃO**

O sucesso da implementação de qualquer plano a longo-prazo exige investimento por ambas entidades públicas e privadas na comunidade, incluindo departamentos publícos da cidade, autarcas, funcionários públicos, empresas, escolas, organizações de bairro e inúmeras instituições públicas e privadas. Enquanto a cidade pretende assumir a liderança na implementação da visão ambiciosa estabelecida neste documento e facilitar a colaboração necessária para garantir que os objetivos deste documento sejam alcançados, espera que este projecto de construir um futuro sustentável para Lowell será amplamente colaborativo por natureza. As páginas seguintes apresentam um plano de como várias entidades em toda a cidade podem contribuir melhor para o processo de implementação.

#### **ELECTED OFFICIALS**

Provide leadership and policy direction to support the shared vision of Lowell as a sustainable city by listening actively to stakeholder concerns, taking a lead in civic education, increasing presence at community meetings and events, supporting efforts to ensure municipal fiscal responsibility and accountability, advocating for the allocation of state and federal resources to address identified community priorities, and striving to diversify participation in public decision-making.



**Photo: Jennifer Myers** 

#### **CITY MANAGER'S OFFICE**

Guided by the City Council, implement and disseminate information regarding city policies and fiscal practices, proactively address community concerns, and manage and retain an effective, efficient, and professional administration with qualified and dedicated staff. In partnership with the **Department of Planning and Development** and other appropriate bodies, identify metrics that can be used to motivate implementation of the plan, track progress, document successes, identify areas for further or corrective action, and communicate this information to internal and external audiences as the plan is implemented.



**Photo: Donna McIntosh** 

# Faculties in the first of the f

#### PLANNING & DEVELOPMENT

Oversee Plan implementation efforts, including data collection and the monitoring of progress, the securing of project funding, and the management of sustainable economic development, housing, and transportation initiatives, among others.

**Photo: DPD** 



## REGIONAL MUNICIPALITIES & AGENCIES

Seek funding and other resources for regional priority projects, while taking the lead to identify opportunities for coordinated planning and resource sharing amongst regional municipalities.

Image: NMCOG



## CITY BOARDS & COMMISSIONS

Employ the guidance and recommendations in this plan as a filter in evaluating and making decisions about proposed projects, initiatives, and policies under the purview of the City's Boards and Commissions.

**Photo: Lowell Telecommunications Corporation** 

#### **PUBLIC HEALTH**

Maintain high-quality, affordable health care access for Lowell residents, supporting the development of policies and programs that will protect their physical well-being and promote healthy, active lifestyles.



Photo: LPD

#### **PUBLIC SAFETY**

Continue to prioritize and expand upon collaborative, data-driven approaches to ensuring the well-being of the community at large, seeking to promote Lowell as a safe and welcoming community.



**Photo: LPD** 

#### **PUBLIC WORKS**

Maintain the highest quality public services, operations, and infrastructure possible, while striving to make existing operations more efficient, cost-effective, and environmentally sustainable.



**Photo: DPD** 

#### **INFORMATION SYSTEMS**

Maintain highly efficient, user-friendly, state of the art communications infrastructure, while implementing strategies that improve access to information and new technological tools for the City administration and community at large.

**Photo: Sean Thibodeau** 



## POLLARD MEMORIAL LIBRARY

Ensure that library resources and programs are accessible to and reflective of the community as a whole.

Photo: Sean Thibodeau



#### **LOCAL MEDIA**

Provide Lowell and the Merrimack Valley Region with accurate and timely reporting, complementing efforts initiated by the City administration, elected officials, and other entities to highlight local accomplishments as well as opportunities for improvement.

**Photo: Robert Scroble** 

## PRIMARY & SECONDARY SCHOOLS

Cultivate schools as diverse, pedestrianaccessible learning laboratories that highlight environmentally sustainable practices, foster community connections and education, create a culture of high expectations, and build a shared sense of ownership over student achievement.



Photo: Lowell Parks & Conservation Trust

## INSTITUTIONS OF HIGHER EDUCATION

Build upon Lowell's emerging identity as a college town through continued physical expansion efforts that align with City goals and priorities, increased investment in a vibrant local economy, and preparation of the student body for 21st century challenges and opportunities, as well as increased efforts to engage faculty and staff with the City.



Photo: UMass Lowell



**Photo: Merrimack Valley Sandbox** 

## BANKS, CREDIT UNIONS, & OTHER FOR-PROFIT INSTITUTIONS

Support local economic development efforts by continuing to partner on municipal initiatives, prioritizing allocation of loans and other funding for Lowell-based organizations, businesses, and institutions, and striving to support a local culture of innovation and entrepreneurship.



**Photo: Merrimack Valley Sandbox** 

### ARTISTS, ENTREPRENEURS & SMALL BUSINESSES

Support and partake in the local culture of entrepreneurship and innovation, striving to meet identified community needs through direct service delivery and to fill market niches wherever possible.



Photo: COOL

## CULTURAL & HISTORIC INSTITUTIONS

Capitalizing on the City's rich historic and cultural resources, continue to invest in community-driven creative place-making efforts that build upon the City's identity as a unique arts and cultural hub.

## NEIGHBORHOOD & CIVIC ORGANIZATIONS

Strive to increase the public sense of civic duty through outreach and education, identification and communication of community challenges and opportunities, active collaboration with public and private entities to improve quality of life and protect neighborhood character, and encouragement of neighborhood level resource-sharing that results in greater public trust and community pride.



**Photo: Narin Sinuon** 

#### ENVIRONMENTAL ADVOCACY ORGANIZATIONS

Educate community members, public officials, and elected leaders as to the importance and benefits of environmentally sustainable practices through outreach efforts, advocacy, and public engagement. Provide leadership through active implementation of demonstration projects, initiatives, and model programs.



**Photo: Lowell Parks & Conservation Trust** 

#### **SOCIAL SERVICE AGENCIES**

Continue to provide social services that meet the needs of Lowell's diverse community, while identifying ways of better sharing resources and information so as to increase efficiency, eliminate redundancies in service delivery, and establish revenue-generating initiatives that ensure greater fiscal autonomy.



Photo: DPD